# PERMIT FORMS AND INSTRUCTIONS PURSUANT TO REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION



# COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR PERMITS

### NEW AND MODIFIED SOURCE PERMITS and STATE OPERATING PERMITS

### Complete the following pages:

All new & modified sources & State Operating Permits: 1, 2, 3

All modified sources: 15

### In addition, complete the following pages:

For "Greenfield" sources and major modifications: xiii

For major stationary sources at undeveloped sites: xv

For boilers, internal combustion engines, turbines: 4, 11, 14, 17, 18

For surface coating operations: 5, 6, 11, 14, 16, 17, 18

For incinerators: 7, 11, 12, 14, 16, 17, 18

For asphalt plants\*: 5, 11, 12, 13, 14, 18

For concrete batch plants\*\*: 5, 12, 13, 14,18

For quarry operations: 5, 12, 13, 14, 18

For loading racks and oil water separators: 10, 11, 14, 16, 17, 18

For VOC storage tanks: 8, 9, 14, 16, 17, 18

For all other sources: 5, 11, 14, (12, 13, 16 & 17 if applicable), 18

<u>NOTE:</u> All unused pages should be marked "N/A" and returned with the application, <u>OR</u> mark the contents/certification page (page 1) to indicate specific pages included.

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<sup>\*\*:</sup> A source-specific Form 7 Application is available for these sources.

### PLEASE READ CAREFULLY

This is an application form for a new or modified source permit, or a state operating permit. The staff of the Department of Environmental Quality reviews all permit applications to determine compliance with State Regulations. The evaluation of a permit application is a detailed and lengthy process, so your application should be submitted as soon as you can furnish the requisite information. A complete application is required prior to our commencing the process of preparing a permit. Once you have submitted a complete application we process your application as quickly as possible. To expedite the permit application and review process, please supply the information requested on the attached form accurately and completely.

A complete application must include:

1. FORM 7	A completed Form 7, including a properly signed Document Certification Form.			
*2. <i>MAP</i>	A Source location map that includes latitude and longitude coordinates for the facility.			
*3. FACILITY	A site plan of the facility including the dimensions of all buildings (length, width and height), all stack and emission point locations by stack number, and the property lines and fence lines.			
*4. PROCESS	A process flow diagram/schematic, a narrative process description and a material balance that reflects the requested permit limits.			
*5. MSDS or CPDS	Material safety data sheets or Certified Product Data Sheets indicating the percent by weight of each ingredient and, for coatings, the VOC content in pounds per gallon.			
6. CALCULATIONS	Calculations of emission estimates. Control technology justification to include economic analysis, if required.			
*7. STACK TEST	Stack test data if applicable.			
*8. <i>MODEL</i>	Air quality modeling based on consultation with the applicable regional office and the Office of Air Permit Programs, if required.			
*9. LOCAL GOVERNING BODY CERTIFICATION FORM	Forward the form to local governing body, if applicable.			
10. PERMIT APPLICATION FEE FORM	For undeveloped major stationary sources, include a copy of the Permit Application Fee form and check or money order with application, if required.			

<sup>\*</sup>Not required for state operating permit applications unless specifically requested.

INSTRUCTIONS ARE PROVIDED FOR EACH PAGE OF THE FORM 7. Should you require additional assistance in completing this application, please contact the regional office for your area as shown on the map and localities list on pages iii-vi. Prior to completing this form, contact the regional office to ensure you are using the most current Form 7. Submit the completed application to the appropriate regional office.

IT IS A VIOLATION OF STATE REGULATIONS TO BEGIN CONSTRUCTION OF OR OPERATE A SOURCE WITHOUT OBTAINING A PERMIT, IF A PERMIT IS REQUIRED

[Note: This form is available in MS Word and Adobe pdf formats on the DEQ website at www.deq.state.va.us.]

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Regional Offices ★Northern Regional Office 13901 Crown Court Woodbridge, Virginia 22193 ★Valley Regional Office fax (703) 583-3801 P.O. Box 3000 (703) 583-3800 Harrisonburg, Virginia 22801 fax (540) 574-7878 Fairfax (540) 574-7800 Fredericksburg Satellite Office 806 Westwood Office Park Fredericksburg, VA 22401 Culpeper fax (540) 899-4647 Highland (540) 899-4600 Augusta ★West Central Regional Office 3019 Peters Creek Road Roanoke, Virginia 24019 fax (540) 562-6725 (540) 562-6700 Chesterfield Amelia Buchana Tazewell Dickenso Bland Dinwiddie Franklin Wythe Floyd Smvth Halifax Washington Carroll Mecklenburg Grayson Patrick

★ Southwest Regional Office 355 Deadmore St. P.O. Box 1688 Abingdon, Virginia 24212 fax (276) 676-4899 (276) 676-4800 ★South Central Regional Office 7705 Timberlake Road Lynchburg, Virginia 24502 fax (434) 582-5125 (434) 582-5120 ★ Piedmont Regional Office 4949-A Cox Road Glen Allen, Virginia 23060 fax (804) 527-5106 (804) 527-5020 ★Tidewater Regional Office 5636 Southern Blvd. Virginia Beach, Virginia 23462 fax (757) 518-2103 (757) 518-2000

### Air Quality Control Region Assignment of Counties, Cities and Localities - List of Counties

County	Region	County	Region
Accomack	TRO	Loudoun	NRO
Albemarle	VRO	Louisa	FSO
Alleghany	WCRO	Lunenburg	SCRO
Amelia	PRO	Madison	FSO
Amherst	SCRO	Mathews	PRO
Appomattox	SCRO	Mecklenburg	SCRO
Arlington	NRO	Middlesex	PRO
Bath	VRO	Montgomery	WCRO
Bedford	WCRO	Nelson	VRO
Bland	SWRO	New Kent	PRO
Botetourt	WCRO	Northampton	TRO
Bristol	SWRO	Northumberland	PRO
Brunswick	PRO	Norton	SWRO
Buchanan	SWRO	Nottoway	SCRO
Buckingham	SCRO	Orange	FSO
Campbell	SCRO	Page	VRO
Caroline	FSO	Patrick	WCRO
Carroll	SWRO	Pittsylvania	SCRO
Charles City	PRO	Powhatan	PRO
Charlotte	SCRO	Prince George	PRO
Chesapeake	TRO	Prince Edward	SCRO
Chesterfield	PRO	Prince William	NRO
Clarke	VRO	Pulaski	WCRO
Craig	WCRO	Rappahannock	FSO
Culpeper	FSO	Richmond	PRO
Cumberland	SCRO	Roanoke	WCRO
Dickenson	SWRO	Rockbridge	VRO
Dinwiddie	PRO	Rockingham	VRO
Essex	PRO	Russell	SWRO
Fairfax	NRO	Scott	SWRO
Fauquier	FSO	Shenandoah	VRO
Floyd	WCRO	Smyth	SWRO
Fluvanna	VRO	Southampton	TRO
Franklin	WCRO	Spotsylvania	FSO
Frederick	VRO	Stafford	FSO
Giles	WCRO	Surry	PRO
Gloucester	PRO	Sussex	PRO
Goochland	PRO	Tazewell	SWRO
Grayson	SWRO	Warren	VRO
Greene	VRO	Washington	SWRO
Greensville	PRO	Westmoreland	PRO
Halifax	SCRO	Wise	SWRO
Hampton	TRO	Wythe	SWRO
Hanover	PRO	York	TRO
Henrico	PRO	TOTA	1110
Henry	WCRO		
Highland	VRO		
Isle of Wight	TRO		
James City	TRO		
King and Queen	PRO		
King George	FSO		
King William	PRO		
Lancaster	PRO		
Lee	SWRO		

SWRO - Southwest Regional Office WCRO - West Central Regional Office VRO - Valley Regional Office

NRO - Northern Regional Office PRO - Piedmont Regional Office TRO - Tidewater Regional Office

SCRO - South Central Regional Office FSO - Fredericksburg Satellite Office

### Air Quality Control Region Assignment of Counties, Cities and Localities - List of Cities and Localities

Cities/Localities	Region	Cities/Localities	Region	Cities/Localities	Region
Accomac	TRO	Chester	PRO	Franklin	TRO
Achilles	PRO	Chesterfield	PRO	Fredericksburg	FSO
Adner	PRO	Chilhowie	SWRO	Galax	SWRO
Alberta	PRO	Chincoteague	TRO	Gasburg	PRO
Alexandria	NRO	Christiansburg	WCRO	George's Tavern	PRO
Allmondsville	PRO	Chula	PRO	Glade Spring	SWRO
Amelia Courthouse	PRO	Church View	PRO	Glen Allen	PRO
Ark	PRO	Claremont	PRO	Glenns	PRO
Arlington	NRO	Clintwood	SWRO	Gloucester	PRO
Ashland	PRO	Coatesville	PRO	Gloucester Point	PRO
Aylett	PRO	Cobbs Creek	PRO	Goochland	PRO
Bacon's Castle	PRO	Cochran	PRO	Gray	PRO
Ballsville	PRO	Coeburn	SWRO	Gressitt	PRO
Barhamsville	PRO	Coles Point	PRO	Greys Point	PRO
Bavon	PRO	Collinsville	WCRO	Grundy	<b>SWRO</b>
Beach	PRO	Colonial Beach	PRO	Gum Spring	PRO
Beaverdam	PRO	Colonial Heights	PRO	Gwynn	PRO
Bedford	WCRO	Columbia	PRO	Hadensville	PRO
Belle Haven	TRO	Covington	WCRO	Hague	PRO
Bensley	PRO	Crozier	PRO	Hallwood	TRO
Bertrand	PRO	Daleville	WCRO	Hampton	TRO
Big Stone Gap	SWRO	Damascus	SWRO	Hanover	PRO
Blacksburg	WCRO	Danieltown	PRO	Harrisonburg	VRO
Bland	SWRO	Danville	SCRO	Hartfield	PRO
Bloxom	TRO	Darvills	PRO	Haynesville	PRO
Bon Air	PRO	Deltaville	PRO	Haysi	SWRO
Boones Mill	WCRO	Dendron	PRO	Heathsville	PRO
Bottoms Bridge	PRO	DeWitt	PRO	Highland Springs	PRO
Bowlers Wharf	PRO	Dinwiddie	PRO	Hillsville	SWRO
Brays Fork	PRO	Disputanta	PRO	Holdcroft	PRO
Brodnax	PRO	Doswell	PRO	Hollins	WCRO
Brunswick	PRO	Dublin	WCRO	Homeville	PRO
Buchanan	WCRO	Dunnsville	PRO	Hopewell	PRO
Buena Vista	VRO	Eagle Rock	WCRO	Hull Neck	PRO
Burgess	PRO	Eastville	TRO	Independence	SWRO
Burrowsville	PRO	Ebony	PRO	Irvington	PRO
Butylo	PRO	Edgerton	PRO	Jarratt	PRO
Cabin Point	PRO	Elberon	PRO	Jetersville	PRO
Callao	PRO	Emporia	PRO	Jonesville	SWRO
Cape Charles	TRO	Ettrick	PRO	Keller	TRO
Caret	PRO	Exmore	TRO	Kilmarnock	PRO
Carson	PRO	Fair Port	PRO	King & Queen	PRO
Cartersville	PRO	Fairfax	NRO	King William	PRO
Center Cross	PRO	Falls Church	NRO	Kinsale	PRO
Central Garage	PRO	Farnham	PRO	Lakeside	PRO
_	PRO	Fife	PRO		PRO
Champlain	PRO	Fincastle		Lancaster	PRO
Charles City Charlottesville	VRO	Fleeton	WCRO PRO	Lanexa	LVO
Cheriton	TRO	Floyd	WCRO		
Chesapeake	TRO	Ford	PRO		

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Cities/Localities	Region	<u>Cities/Localities</u> Norfolk	Region	Cities/Localities	Region
Laurel Lawrenceville	PRO PRO		TRO PRO	Stony Creek Stratford Hall	PRO PRO
		Nuttsville			
Lebanon	SWRO	Oak Grove	PRO	Stuart	WCRO
Leedstown	PRO	Oilville	PRO	Studley	PRO
Lerty	PRO	Old Church	PRO	Suffolk	TRO
Lewisetta	PRO	Onancock	TRO	Surry	PRO
Lexington	VRO	Onley	TRO	Sussex	PRO
Lilian	PRO	Painter	TRO	Sutherland	PRO
Littleton	PRO	Parksley	TRO	Tabscott	PRO
Litwalton	PRO	Pearisburg	WCRO	Talleysville	PRO
Lively	PRO	Petersburg	PRO	Tangier Island	TRO
Loretto	PRO	Poquoson	TRO	Tappahannock	PRO
Lottsburg	PRO	Portsmouth	TRO	Tazewell	SWRO
Low Moor	WCRO	Potomac Beach	PRO	Templeman	PRO
Lyells	PRO	Powhatan	PRO	Trenholm	PRO
Lynchburg	SCRO	Prince George	PRO	Troutville	WCRO
Maidens	PRO	Providence Forge	PRO	Urbana	PRO
Manakin-Sabot	PRO	Pulaski	WCRO	Valentines	PRO
Manassas	NRO	Purdy	PRO	Varina	PRO
Manassas Park	NRO	Radford	WCRO	Village	PRO
Mangohick	PRO	Reedville	PRO	Vinton	WCRO
Mannboro	PRO	Remlik	PRO	Virginia Beach	TRO
Manquin	PRO	Richlands	SWRO	Wachapreague	TRO
Marion	SWRO	Richmond, City of	PRO	Wakefield	PRO
Martinsville	WCRO	Ridgeway	WCRO	Walkerton	PRO
Matoaca	PRO	Ripplemead	WCRO	Walnut Point	PRO
Matthews	PRO	Roanoke	WCRO	Ware Neck	PRO
McKenney	PRO	Rock Castle	PRO	Wares Wharf	PRO
Meadows of Dan	WCRO	Rockville	PRO	Warner	PRO
Mechanicsville	PRO	Rocky Mount	WCRO	Warsaw	PRO
Melfa	TRO	Roxbury	PRO	Water View	PRO
Midlothian	PRO	Rural Retreat	SWRO	Waverly	PRO
Millers Tavern	PRO	Saint Stevens Church	PRO	Waynesboro	VRO
Mobjack	PRO	Salem	WCRO	Weems	PRO
Moneta	WCRO	Saluda	PRO	West Point	PRO
Montpelier	PRO	Sandston	PRO	White Stone	PRO
Montross	PRO	Sandy Point	PRO	White Marsh	PRO
Moon	PRO	Saxis	TRO	White Plains	PRO
Morattico	PRO	Scotland	PRO	Wicomico Church	PRO
Morven	PRO	Scotts Fork	PRO	Williamsburg	TRO
Moseley	PRO	Severn	PRO	Wilsons	PRO
Mount Holly	PRO	Shackelfords	PRO	Winchester	VRO
Mundy Point	PRO	Sharps	PRO	Windmill Point	PRO
Narrows	WCRO	Short Pump	PRO	Winterpock	PRO
		Skippers		-	
Nassawadox Naxera	TRO PRO	Smith Point	PRO PRO	Wise Wytheville	SWRO SWRO
				•	
New Castle	WCRO	Spring Grove	PRO	Yale	PRO
New Kent	PRO	Staunton	VRO		
New Point	PRO	Stevensville	PRO		
Newport	WCRO	Stingray Point	PRO		
Newport News	TRO				
Newtown	PRO				

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### CONFIDENTIAL INFORMATION

Under the Virginia Freedom of Information Act (FOIA) (*Virginia Code* Title 2.2, Chapter 37) and by regulation (9 VAC 5-170-60), all information submitted by the applicant is available to anyone requesting the information unless it is certified by the applicant as meeting all of the criteria listed in 9 VAC 5-170-60 C:

"In order to be exempt from disclosure to the public under subsection B of this section, the record, report or information must satisfy the following criteria:

- Information for which the company has been taking and will continue to take measures to protect the confidentiality:
- 2. Information that has not been and is not presently reasonably obtainable without the company's consent by private citizens or other firms through legitimate means other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding;
- 3. Information which is not publicly available from sources other than the company; and
- 4. Information the disclosure of which would cause substantial harm to the company."

However, emissions data shall be available to the public without exception (9 VAC 5-170-60 A). Emissions data include those data meeting the definition found in federal regulations at 40 CFR 2 Sec. 2.301, which states:

"Emission data means, with reference to any source of emission of any substance into the air--

- A. Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;
- B. Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any emission which, under an applicable standard or limitation, the source was authorized to emit (including, to the extent necessary for such purposes, a description of the manner or rate of operation of the source); and
- C. A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source)."

Applicants should consider the "information necessary to determine..." language in the definition, which can include information on throughputs, heat rates, emissions factors, and other characteristics required to derive information on actual or authorized emissions.

In order for DEQ to accept a claim of confidentiality, the applicant must do all of the following:

• Prepare both confidential and non-confidential versions of the application;

The front page of the confidential copy and any subsequent pages containing confidential information should be labeled or stamped "Confidential." "Proprietary." or "Trade Secret."

The public version should indicate which information or data have been removed or blacked out due to confidentiality by labeling those parts or elements of the application as confidential. If an entire page is confidential, there should be a corresponding non-confidential page describing the type of information held confidential, for instance, "Process Flow Diagram (confidential)."

The non-confidential version of the application should be structured so that the permit can be written from the information provided in that version. If this is not feasible then the reasons should be documented in the showing provided with the application. DEQ regional offices can provide a copy of the DEQ Air Permitting Confidentiality Policy, which discusses some approaches to structuring applications so that the permit can reflect the non-confidential information.

Remove only confidential information

If a page contains both confidential and non-confidential information, the public version must contain all of the non-confidential information. The applicant may not remove all the information on a page or application section or part because some of the information is confidential.

Refrain from confidentiality claims for emission data that cannot be held confidential
 Information necessary to determine emissions or what the source is authorized to emit cannot be held confidential.

 Prepare and certify a showing document for all information claimed as confidential and has been removed or omitted from the public version of the application.

The applicant must prepare a document showing that each type of information or data claimed as confidential meets the criteria of 9 VAC 5-170-60 C as discussed above. The showing document is itself public information subject to FOIA, so the applicant should not include confidential information in the showing document. The applicant must certify the showing.

The showing should follow the format of the example provided below. The certification must contain the wording found in the example.

### **Example Showing**

Throughout the referenced application, XYZ Company claims throughputs of Equipment A, B, and C and composition information of our final blended products as confidential.

### **Throughputs**

XYZ protects the confidentiality of this information by:

- Keeping the information under lock and key except when designated employees have need of its use.
- Allowing only those employees who have a "need to know" access to this information. Other XYZ employees do not have access to
  this information.
- Requiring all employees who have access to this information to sign a confidentiality agreement.

Disclosure of the throughputs of Equipment A, B, and C could cause substantial harm to XYZ by allowing competitors to better determine our costs. Both fixed and variable costs in our industry are highly dependent on the scale of operations. Disclosure of this information would give competitors information with which they could determine our production capacity, which we believe they do not know at this time. To the best of our knowledge, this information is not publicly available and is not reasonably obtainable by the public or other unauthorized parties.

### **Product Composition**

XYZ protects the confidentiality of this information by:

- Keeping the information under lock and key except when designated employees have need of its use.
- Allowing only those employees who have a "need to know" access to this information. Other XYZ employees do not have access to this information.
- Requiring all employees who have access to this information to sign a confidentiality agreement.
- Requiring customers who have access to this information to sign confidentiality agreements

Disclosure of the composition of our final blended products could cause substantial harm to XYZ by allowing competitors to reverse engineer our products. XYZ has invested significant resources over many years developing these products. Disclosure of these compositions could allow competitors to copy our products without them being required to expend the resources we have spent developing them, thereby reducing our current competitive advantage. To the best of our knowledge, this information is not publicly available and is not reasonably obtainable by the public or other unauthorized parties.

### Certification

I hereby certify under penalty of law that to the best of my knowledge and belief, after diligent inquiry, the information claimed above as confidential meets the confidential information criteria of 9 VAC 5-170-60 C and 40 CFR 2.208 and is not "emissions data." Further, to the best of my knowledge, this information has never been determined not to be confidential information by EPA or any other agency, nor has it ever been disclosed to the public by EPA or any other agency.

Typed Name and Title of Responsible Official	
Signature of Responsible Official	
Date	

DEQ staff will review the material to determine its eligibility for confidential treatment and will inform you in writing of the determination. If you have any questions, please contact the DEQ regional office to which the application is made.

### FORMULA-BASED TOXIC POLLUTANT INFORMATION

The Virginia Department of Environmental Quality (DEQ) has developed permit conditions which allow a stationary source to make minor changes in solvent and industrial process formulations without requiring the source to undergo the entire permit application and review process for the change. Formula-based toxic pollutant conditions may be applied to any source that may change toxic solvents and process chemical formulations frequently after the permit is issued. Such sources may include miscellaneous parts coating "job shops", printing facilities, and pharmaceutical manufacturing facilities.

Formula-based toxic pollutant conditions may be incorporated into the present permitting activities of the DEQ on behalf of the source to allow minor changes in toxic solvent and industrial process formulations that do not result in toxic pollutant concentrations in excess of the significant ambient air concentrations as established in Chapter 60, Part II, Article 5 of the Commonwealth of Virginia's Regulations for the Control and Abatement of Air Pollution.

With the use of formula-based toxic conditions, the permittee is required to provide proper notification to the DEQ within fifteen (15) days after <u>any change</u> in solvent or process chemical formulation, rather than undergoing the entire permit application and review process for minor changes in toxic compounds.

However, in some cases, a change in solvents or process chemical formulations or the use of additional toxic compounds may be subject to additional permitting requirements. The permittee should be aware that use of these permit conditions does not relieve the permittee of the responsibility of complying with other conditions of the permit and with the following:

- A. If permit modification is required, failure to obtain the permit prior to the change in process formulation or use of any additional toxic compound may result in enforcement action with civil charges.
- B. Use of any additional toxic compound subject to federal regulation as a hazardous air pollutant may subject the facility to additional permitting requirements.
- C. Discontinuation in the use of previously permitted toxic compounds and the subsequent use of additional toxic compounds shall not exempt the permittee from applicable federal regulation for hazardous air pollutants.

For further details, please contact the DEQ regional office.

A list of toxics and federal HAPs is provided on pages xi and xii.

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### **DEPARTMENT OF ENVIRONMENTAL QUALITY HAZARDOUS AIR POLLUTANT LIST** PAGE 1 OF 2

CAS# NAME	CAS# NAME
75-07-0 ACETALDEHYDE	117-81-7 DI-SEC-OCTYL PHTHALATE / BIS(2-
60-35-5 ACETAMIDE	ETHYLHEXYL)PHTHALATE
75-05-8 ACETONITRILE	334-88-3 DIAZOMETHANE
98-86-2 ACETOPHENONE	132-64-9 DIBENZOFURANS
53-96-3 2-ACETYLAMINOFLUORENE	96-12-8 1,2-DIBROMO-3-CHLOROPROPANE
107-02-8 ACROLEIN	84-74-2 DIBUTYL PHTHALATE
79-06-1 ACRYLAMIDE	106-46-7 1-4 DICHLOROBENZENE
79-10-7 ACRYLIC ACID	91-94-1 3,3'-DICHLOROBENZIDENE
107-13-1 ACRYLONITRILE	75-34-3 1,1-DICHLOROETHANE / ETHYLIDENE DICHLORIDE
107-05-1 ALLYL CHLORIDE	107-06-2 1,2-DICHLOROETHANE / ETHYLENE DICHLORIDE
92-67-1 4-AMINODIPHENYL	111-44-4 DICHLOROETHYL ETHER /
62-53-3 ANILINE & HOMOLOGUES	BIS(2-CHLOROETHYL)ETHER
90-04-0 o-ANISIDINE	542-75-6 1,3-DICHLOROPROPENE
ANTIMONY COMPOUNDS <sup>1</sup>	62-73-7 DICHLORVOS
ARYTIMONT COMPOUNDS	
	111-42-2 DIETHANOLAMINE
71-43-2 BENZENE (including benzene from gasoline)	64-67-5 DIETHYL SULFATE
92-87-5 BENZIDINE	119-90-4 3,3-DIMETHOXYBENZIDINE
98-07-7 BENZOTRICHLORIDE	60-11-7 DIMETHYL AMINOAZOBENZENE /
100-44-7 BENZYL CHLORIDE	4-DIMETHYLAMINOAZOBENZENE
BERYLLIUM COMPOUNDS	79-44-7 DIMETHYL CARBAMOYL CHLORIDE
92-52-4 BIPHENYL	77-78-1 DIMETHYL SULFATE
72-55-9 2,2-BIS(p-CHLORPHENYL)-1,1-DICHLORO-	121-69-7 DIMETHYLANILINE
ETHYLENE/DDE	119-93-7 3,3-DIMETHYLBENZIDINE
75-25-2 BROMOFORM	68-12-2 DIMETHYL FORMAMIDE / N,N-DIMETHYLFORMAMIDE
106-99-0 1,3-BUTADIENE	57-14-7 1,1-DIMETHYLHYDRAZINE
CADMIUM COMPOUNDS	131-11-3 DIMETHYL PHTHALATE
156-62-7 CALCIUM CYANAMIDE	534-52-1 4,6-DINITRO-o-CRESOL (including Salts)
133-06-2 CAPTAN	51-28-5 2,4-DINITROPHENOL
63-25-2 CARBARYL	121-14-2 2,4-DINITROTOLUENE
75-15-0 CARBON DISULFIDE	123-91-1 1,4-DIOXANE / 1,4-DIETHYLENEOXIDE
56-23-5 CARBON TETRACHLORIDE	122-66-7 1,2-DIPHENYLHYDRAZINE
463-58-1 CARBONYL SULFIDE	106-89-8 EPICHLOROHYDRIN
120-80-9 CATECHOL	106-88-7 1,2-EPOXYBUTANE
79-11-8 CHLOROACETIC ACID	110-80-5 2-ETHOXYETHANOL 3
133-90-4 CHLORAMBEN	140-88-5 ETHYL ACRYLATE
57-74-9 CHLORDANE	100-41-4 ETHYL BENZENE
7782-50-5 CHLORINE	51-79-6 ETHYL CARBAMATE / URETHANE
126-99-8 β-CHLOROPRENE / 2-CHLORO-1,3-BUTADIENE	75-00-3 ETHYL CHLORIDE / CHLOROETHANE
532-27-4 2-CHLOROACETOPHENONE	106-93-4 ETHYLENE DIBROMIDE / EDB / 1,2-DIBROMOETHANE
108-90-7 CHLOROBENZENE	107-21-1 ETHYLENE GLYCOL
510-15-6 CHLOROBENZILATE	75-21-8 ETHYLENE OXIDE
67-66-3 CHLOROFORM	96-45-7 ETHYLENE THIOUREA / ETU
107-30-2 CHLOROMETHYL METHYL ETHER / CMME	151-56-4 ETHYLENIMINE
542-88-1 BIS-(CHLOROMETHYL) ETHER	50-00-0 FORMALDEHYDE
CHROMIUM COMPOUNDS	
COBALT COMPOUNDS	The following pollutants and pollutant source categories are listed as HAPs under
COKE OVEN EMISSIONS	section 112(b) but are excluded from the definitions of toxics in the Virginia
1319-77-3 CRESOLS / CRESYLIC ACID	Regulations:
95-48-7 o-CRESOL	11050.1101.010
108-39-4 m-CRESOL	1. Asbestos NESHAP, 40 CFR 61 Subpart M (for asbestos removal,
106-44-5 P-CRESOL	demolition and installation contact Virginia Department of Labor -
98-82-8 CUMENE	804/786-8009).
CYANIDE COMPOUNDS <sup>2</sup>	2. Fine Mineral Fibers.
94-75-7 2,4-DICHLOROPHENOXYACETIC ACID (including salts and	3. Radionuclides (including radon).
esters)	

### **DEPARTMENT OF ENVIRONMENTAL QUALITY HAZARDOUS AIR POLLUTANT LIST** PAGE 2 OF 2

CAS# NAME --- GLYCOL ETHERS<sup>3</sup> 76-44-8 HEPTACHLOR 118-74-1 HEXACHLOROBENZENE 87-68-3 HEXACHLOROBUTADIENE 77-47-4 HEXACHLOROCYCLOPENTADIENE 67-72-1 HEXACHLOROETHANE 680-31-9 HEXAMETHYL PHOSPHORAMIDE / HMPA 822-06-0 HEXAMETHYLENE DIISOCYANATE 110-54-3 HEXANE 302-01-2 HYDRAZINE 7647-01-0 HYDROGEN CHLORIDE/ HYDROCHLORIC ACID (gas only) 7664-39-3 HYDROGEN FLUORIDE / HYDROFLUORIC ACID 123-31-9 HYDROQUINONE / DIHYDROXYBENZENE 78-59-1 ISOPHORONE 109-59-1 ISOPROPOXYETHANOL 3 --- LEAD COMPOUNDS 58-89-9 LINDANE (AND ALL OTHER STEREOISOMERS OF 1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE) 108-31-6 MALEIC ANHYDRIDE MANGANESE COMPOUNDS ----- MERCURY COMPOUNDS 67-56-1 METHANOL 72-43-5 METHOXYCHLOR 109-86-4 2-METHOXYETHANOL<sup>3</sup> 74-83-9 METHYL BROMIDE / BROMOMETHANE 74-87-3 METHYL CHLORIDE / CHLOROMETHANE 71-55-6 METHYL CHLOROFORM / 1,1,1-TRICHLOROETHANE 60-34-4 METHYL HYDRAZINE 74-88-4 METHYL IODIDE/IODOMETHANE 108-10-1 METHYL ISOBUTYL KETONE / HEXONE 624-83-9 METHYL ISOCYANATE 80-62-6 METHYL METHACRYLATE 1634-04-4 METHYL TERT BUTYL ETHER 101-14-4 4,4- METHYLENE BIS(2-CHLOROANILINE) 101-68-8 4,4'-METHYLENE DIPHENYL DIISOCYANATE / MDI 75-09-2 METHYLENE CHLORIDE / DICHLOROMETHANE 101-77-9 4,4-METHYLENE DIANILINE 91-20-3 NAPHTHALENE --- NICKEL COMPOUNDS 98-95-3 NITROBENZENE 92-93-3 4-NITRODIPHENYL 100-02-7 4-NITROPHENOL 79-46-9 2-NITROPROPANE 684-93-5 N-NITROSO-N-METHYLUREA / NMU 62-75-9 N-NITROSODIMETHYLAMINE / NDMA 59-89-2 N-NITROSOMORPHOLINE / NMOR 56-38-2 PARATHION 82-68-8 PENTACHLORONITROBENZENE / QUINTOBENZENE 87-86-5 PENTACHLOROPHENOL 108-95-2 PHENOL 106-50-3 P-PHENYLENEDIAMINE 75-44-5 PHOSGENE / CARBONYLCHLORIDE 7803-51-2 PHOSPHINE 7723-14-0 PHOSPHORUS 85-44-9 PHTHALIC ANHYDRIDE 1336-36-3 POLYCHLORINATED BIPHENYLS / AROCHLORS ----- POLYCYCLIC ORGANIC MATTER / POM<sup>4</sup> 1120-71-4 1,3-PROPANE SULTONE 57-57-8 β-PROPIOLACTONE 123-38-6 PROPIONALDEHYDE 114-26-1 PROPOXUR / BAYGON

78-87-5 PROPYLENE DICHLORIDE / 1,2-DICHLOROPROPANE

CAS# NAME 75-56-9 PROPYLENE OXIDE / 1,2-EPOXYPROPANE 91-22-5 QUINOLINE 106-51-4 OUINONE --- SELENIUM COMPOUNDS 100-42-5 STYRENE, MONOMER / VINYL BENZENE 96-09-3 STYRENE OXIDE 1746-01-6 2,3,7,8-TETRACHLORODIBENZO-p-DIOXIN 79-34-5 1,1,2,2-TETRACHLOROETHANE 127-18-4 TETRACHLOROETHYLENE / PERCHLOROETHYLENE 7550-45-0 TITANIUM TETRACHLORIDE 108-88-3 TOLUENE 95-80-7 2,4-TOLUENE DIAMINE / TOLUENE-2,4-DIAMINE 584-84-9 TOLUENE-2,4-DIISOCYANATE / TDI 95-53-4 O-TOLUIDINE 8001-35-2 TOXAPHENE / CHLORINATED CAMPHENE 120-82-1 1,2,4-TRICHLOROBENZENE 79-00-5 1,1,2-TRICHLOROETHANE 79-01-6 TRICHLOROETHYLENE 95-95-4 2,4,5-TRICHLOROPHENOL 88-06-2 2,4,6-TRICHLOROPHENOL 121-44-8 TRIETHYLAMINE 1582-09-8 TRIFLURALIN 540-84-1 2,2,4-TRIMETHYLPENTANE 108-05-4 VINYL ACETATE 593-60-2 VINYL BROMIDE 75-01-4 VINYL CHLORIDE / CHLOROETHYLENE 75-35-4 VINYLIDENE CHLORIDE / 1.1-DICHLOROETHYLENE 1330-20-7 XYLENE ISOMERS AND MIXTURES

<sup>1</sup>For all listing above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical as part of that chemical's infrastructure.

<sup>2</sup>X'CN where X=H' or any other group where a formal dissociation may occur. For example, KCN or Ca(CN)2

<sup>3</sup>Glycol ethers include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR'

n = 1, 2, or 3where:

95-47-6 O-XYLENE

108-38-3 M-XYLENE

106-42-3 P-XYLENE

R = alkyl C7 or less, or phenyl or alkyl substituted phenyl R' = H, or alkyl C7 or less, or carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate

2-Ethoxyethanol, Isopropoxyethanol, and 2-Methoxyethanol meet this definition, but are considered as only one HAP (glycol ethers) for Title V and CAAA §112 purposes. They are also listed individually in this table as a reminder that because they have TLVs, they must be considered separately under Virginia's Toxic Pollutant regulations (9 VAC 5 Chapter 60, Articles 4 and 5).

<sup>4</sup>Includes substituted and/or unsubstituted polycyclic aromatic hydrocarbons and aromatic heterocycle compounds, with two or more fused rings, at least one of which is benzenoid in structure. Polycyclic Organic Matter is a mixture of organic compounds containing one or more of these polycyclic aromatic chemicals which include dioxins and furans. Polycyclic Organic Matter is generally formed or emitted during thermal processes including (1) incomplete combustion, (2) pyrolysis, (3) the volatilization, distillation or processing of fossil fuels or bitumens, or (4) the distillation or thermal processing of non-fossil fuels.

75-55-8 1,2-PROPYLENE IMINE

### VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR PERMITS

LOCAL GOVERNING BODY CERTIFICATION FORM				
Facility Name:	Registration Number:			
Applicant's Name:	Name of Contact Person at the site:			
Applicant's Mailing address:	Contact Person Telephone Number:			
Facility location (also attach map):				
Facility type, and list of activities to be con	nducted:			
The applicant is in the process of completing an application for Department of Environmental Quality. In accordance with § 10.1-1321 before such a permit application can be considered complete, the applic the county, city or town in which the facility is to be located that the local applicable ordinances adopted pursuant to Chapter 22 (§§ 15.2-2200 et authorized representative of the local governing body sign the certification.)	1.1. Title 10.1, Code of Virginia (1950), as amended, cant must obtain a certification from the governing body of ation and operation of the facility are consistent with all t seq.) of Title 15.2. The undersigned requests that an			
Applicant's signature:	Date:			
The undersigned local government representative certifies to the consistency of the proposed location and operation of the facility described above with all applicable local ordinances adopted pursuant to Chapter 22 (§§15.2-2200 et seq.) of Title 15.2. of the Code of Virginia (1950) as amended, as follows:  (Check one block)  The proposed facility is fully consistent with all applicable local ordinances.  The proposed facility is inconsistent with applicable local ordinances; see attached information.				
Signature of authorized local government representative:	Date:			
Type or print name:	Title:			
County, city or town:				

[THE LOCAL GOVERNMENT REPRESENTATIVE SHOULD FORWARD THE SIGNED CERTIFICATION TO THE APPROPRIATE DEQ REGIONAL OFFICE AND SEND A COPY TO THE APPLICANT.]

### LOCAL GOVERNING BODY CERTIFICATION FORM

Effective July 1, 1993, Section 10.1-1321.1 of the Code of Virginia specifies that:

- "A. No application for a permit for a new or major modified stationary air pollution source shall be considered complete unless the applicant has provided the Director with notification from the governing body of the county, city, or town in which the source is to be located that the location and operation of the source are consistent with all ordinances adopted pursuant to Chapter 22 (15.2-2200 et seq.) of Title 15.2."
- "B. The governing body shall inform in writing the applicant and the Department of the source's compliance or noncompliance not more than 45 days from receipt by the chief executive officer, or his agent, of a request from the applicant."
- "C. Should the governing body fail to provide written notification as specified in subsection B of this section, the requirement for such notification as specified in subsection A of this section is waived."

### Definitions:

- Any new site (not previously designated as a stationary source) upon which one or more emissions units undergo initial
  construction, installation, or relocation shall be considered a **New Source**; a "green field" source.
- Any existing stationary source making changes to emission units (construction, installation, modification, reconstruction, or relocation) shall be considered a Modified Source. Modified sources need only use this form if the modification is major.
- Any stationary source that emits, or has the potential to emit, 100 tons or more per year of any regulated air pollutant shall be considered a "Major Source". "Regulated air pollutant" is defined in 9 VAC 5-80-1110 C.
- Any modified source, the modification of which is equivalent to the definition of a "major source", shall be considered a Major Modified Source.
- Any "major source", the modification of which results in a "significant" net emissions increase of any regulated pollutant, shall be considered a Major Modified Source.
- Emissions levels that are considered Significant for stationary sources located in Prevention of Significant Deterioration Areas
  are listed in the definition of "significant" in 9 VAC 5-80-1710 C. Emission levels that are considered "significant" for stationary
  sources located in Non-attainment Areas are listed in the definition of "significant" in 9 VAC 5-80-2010 C.

If required, the attached form should be submitted for all applications to the appropriate officials of the county, city, or town in which your facility is to be located. (The form is not required for Operating Permits insofar as these pertain to previously existing and operating sources.)

- 1. <u>Applicant:</u> Fill out the top section of the form and sign in the center block. Send the partially completed notification form to the local governing body by certified mail/return receipt, and keep a copy of the return receipt. A copy of the return receipt should then be submitted with the application to the appropriate DEQ regional office.
- 2. <u>Local officials:</u> You may use either this form or a certification designed by the locality. If you use this form, please fill out the bottom section of the form. The form asks you to certify that the facility is or will be consistent with all applicable local ordinances. Please check the appropriate box, sign the form and if there is inconsistency, please attach an explanation that indicates the corrective measures being taken. Then forward the form (or the certification designed by the locality) to the appropriate DEQ regional office within 45 days following receipt of the request from the applicant. (A postmark date within 45 days of receipt is sufficient.) Send a copy of the completed form to the applicant.

There are two ways for an applicant for a new or major modified stationary air pollution source permit to comply with this requirement. (1) When a completed form is received by DEQ indicating that locality certifies that the location and operation of the proposed source are in compliance with local ordinances, then this requirement is met. (2) If the locality fails to respond in writing to the request within 45 days of receipt, then this requirement is met when the applicant provides DEQ with evidence that the locality has received the form and has failed to respond in writing within the 45-day period.

### **DEPARTMENT OF ENVIRONMENTAL QUALITY** AIR PERMIT APPLICATION FEE

#### INTRODUCTION

Applicants for an Air Permit for the construction/relocation/reactivation of a NEW major stationary source at an undeveloped site are required to pay a permit application fee. (Applications for "exempt" sources, new "non-major" sources, and "modified" sources are NOT subject to permit application fees.)

If the proposed stationary source is "new", will be located at an "undeveloped site" and is considered "major" under one of the following NSR air permit programs, then the air permit application must be accompanied with the appropriate application fee: Major Stationary Sources in Prevention of Significant Deterioration (PSD) Areas, Major Stationary Sources Locating in Nonattainment Areas, or New Major Sources of Hazardous Air Pollutants. Also, air permit applications for new major stationary sources subject to New Source Review and/or General Permits under Chapter 80, Article 6 of the Regulations must be accompanied by the appropriate application fee.

Applications will be considered incomplete if the proper fee is not paid and will not be processed until the fee is received. Air permit application fees are not refundable.

Instructions and references are provided on the reverse side of this form. If required, this form and a check (or money order) payable to "Treasurer of Virginia" should be mailed to the Department of Environmental Quality, Receipts Control, P.O. Box 1105, Richmond, VA 23218. Copies of the form and check (or money order) should accompany the permit application. Retain a copy for your records. Any questions should be directed to the DEQ regional office to which the application will be submitted.

COMPANY	OMPANY NAME: FIN:						
COMPANY	REPRESENT	ATIVE:					
MAILING A	DDRESS:						
BUSINESS	PHONE:				FAX:		
FACILITY I	NAME:						
PHYSICAL	LOCATION:						
Check al	l that apply to	this applicat	ion for a NE	EW MAJOR ST	TATIONARY SOU	RCE:	
Types of NSR Review Required:	☐ PSD Major NSR Review	□ NON-AT1	TAINMENT Major NSR Review	☐ HAP Major NSR Review	☐ ARTICLE 6 NSR Review	☐ ARTICLE 6 GENERAL PERMIT	TOTAL PERMIT APPLICATION FEE
AMOUNT OF FEE:	\$30,000	\$20,000		\$15,000	\$5,300	\$300	\$ (MAX \$30,000)
·	DEQ OFFICE	TO WHICH F	PERMIT APP	PLICATION WI	LL BE SUBMITTE	ED (check one)	
Abingdon/SWRO Harrisonburg/VRO Fredericksburg/FSO Woodbridge/NVRO Lynchburg/SCRO Richmond/PRO Roanoke/WCRO Virginia Beach/TRO							
		_					
FOR Date: DC #: Reg. No.:	DEQ USE ONLY		P.O. Bo	x 1105, Rich	and Check to: mond, VA 2321 n and Check to	18	

INS <sup>1</sup>	ΓPΙ	ICI		NIS
114.3		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11. /	

This form must be completed and submitted with an appropriate permit application fee if the air permit application (Form 7) is for a proposed stationary source that meets ALL of the following:

- 1. The application is subject to new source review (NSR) permitting requirements under one or more of the four New Source Review permit programs described in Chapter 80 of the Regulations: Article 8 (PSD Major NSR), Article 9 (Nonattainment Major NSR), Article 7 (Hazardous Air Pollutant Major NSR) or Article 6 (New Source Review for Stationary Sources). □ YES □ NO
- 2. The proposed stationary source is "new" in the sense that ALL of the proposed emissions units will be either constructed at the site, relocated to the site, or reactivated at the site.
- 3. The site of the proposed stationary source is "undeveloped" in the sense that there are no emissions units already legally constructed and/or operating at the site (i.e. the proposed stationary source will not become part of the same stationary source with a stationary source already there).
- 4. The proposed new stationary source will be classified as a "major stationary source" under one of the applicable NSR permit programs (listed in 1. above).

If the application meets ALL FOUR of the above requirements, then complete this Application Fee Form as follows and submit it with a check (or money order) for the appropriate permit fee to DEQ Receipts Control:

- 1. Provide the full name of the company and the mailing address to which the permit will be sent.
- 2. Provide the name and contact information for a company Representative that has a good working knowledge of the project and who will be able to answer questions concerning the application.
- 3. Provide the name of the proposed facility and its full street address. If no street address is available, then provide a description of the location of the proposed facility (such as directions on how to get there).
- 4. Check off each of the types of air permit NSR review that the application will be subject to. If you are unsure which regulation applies to your project, refer to the Virginia Regulations cited below. The air regulations are available on the VADEQ internet site: <a href="http://www.deq.virginia.gov/air/regulations/airregs.html">http://www.deq.virginia.gov/air/regulations/airregs.html</a>. If you need assistance, contact the DEQ regional office that will be reviewing the application.
- 5. Add together all of the fee values under the checked NSR programs that are applicable and fill in the total under "Total Permit Application Fee". 9 VAC 5-80-2250 requires that projects falling under the jurisdiction of two or more Virginia NSR permit regulations will pay an application fee equaling the sum of the individual fees, up to but not exceeding \$30,000.00.
- 6. Indicate which VADEQ Regional Office will be reviewing the air quality permit application.
- 7. Mail the completed form and a check (or money order) for the amount of the air permit application fee (made payable to "Treasurer of Virginia") to the Department of Environmental Quality, Receipts Control, P.O. Box 1105, Richmond, VA 23218.
- 8. A copy of the form and a copy of the check (or money order) should also accompany the permit application sent to the appropriate DEQ regional office. Keep a copy for your records. Direct any questions regarding this form or payment of the permit application fees to the DEQ regional office to which you are submitting your application.

Applicable NSR permit program:	VA Administrative Code:
Major Stationary Sources Locating in PSD Areas (Ch. 80, Article 8)	9 VAC 5-80-1700 through 1970
Major Stationary Sources Locating in Non-attainment Areas (Ch. 80, Article 9)	9 VAC 5-80-2000 through 2240
NewMajor Sources of Hazardous Air Pollutants (Ch. 80, Article 7)	9 VAC 5-80-1400 through 1590
NewStationary Sources (Ch. 80, Article 6)	9 VAC 5-80-1100 through 1320
General Permits (also Ch. 80, Article 6)	9 VAC 5-80-1250

### COMMONWEALTH OF VIRGINIA Department of Environmental Quality



### AIR PERMIT APPLICATION General information CHECK ALL FORMS THAT APPLY AND LIST ALL ATTACHED DOCUMENTS.

MAP AND LOCALITIES LIST (information), Pages iii-vi	PAST ACTUAL ANNUAL CRITERIA POLLUTANT EMISSIONS, Page 15	
CONFIDENTIAL INFORMATION, Page vii-viii	TOXIC OR HAP EMISSIONS, Page 16	
FORMULA-BASED HAZARDOUS AIR POLLUTANT INFORMATION, Page ix	OTHER REGULATED EMISSIONS, Page 17	
HAZARDOUS AIR POLLUTANT LIST (information), Pages xi-xii	OPERATING PERIODS, Page 18	
REQUEST FOR LOCAL GOVERNMENT CERTIFICATION FORM, Page хііі	LIST ATTACHED DOCUMENTS	
CONTENTS AND DOCUMENT CERTIFICATION, Page 1	LIST ATTACHED DOCUMENTS	
GENERAL INFORMATION, Page 2	MAP of SITE LOCATION	
GENERAL INFORMATION (continued), Page 3	FACILITY SITE PLAN	
FUEL-BURNING EQUIPMENT, Page 4	PROCESS FLOW DIAGRAM/SCHEMATIC	
PROCESSING, Page 5	MSDS or CPDS SHEETS ESTIMATED EMISSIONS CALCULATIONS	
INKS, COATINGS, STAINS, AND ADHESIVES, Page 6		
INCINERATORS, Page 7	STACK TESTS	
VOLATILE ORGANIC COMPOUND/PETROLEUM STORAGE TANKS, Page 8	AIR MODEL DATA	
VOLATILE ORGANIC COMPOUND/PETROLEUM STORAGE TANKS - CONTINUED, Page 9		
LOADING RACKS AND OIL-WATER SEPARATORS, Page 10		
STACK PARAMETERS AND FUEL DATA, Page 11		
AIR POLLUTION CONTROL AND MONITORING EQUIPMENT, PAGE 12		
AIR POLLUTION CONTROL/SUPPLEMENTAL INFORMATION, PAGE 13		
PROPOSED MAXIMUM CRITERIA POLLUTANT EMISSIONS, Page 14		

Note added form sheets above; also indicate the number of copies of each form in blank provided.

### DOCUMENT CERTIFICATION FORM

(see other side for instructions)

I certify under penalty of law that this document and all attachments [as noted above] were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I certify that I understand that the existence of a permit under [Article 6 of the Regulations] does not shield the source from potential enforcement of any regulation of the board governing the major NSR program and does not relieve the source of the responsibility to comply with any applicable provision of the major NSR regulations.

SIGNATURE:	DATE:
NAME:	
TITLE:	REGISTRATION
COMPANY:	NUMBER:
	- 1-1'\ 0\/AO F 00 000D10\/AO F 00 4440F 0

References: <u>Virginia Regulations for the Control and Abatement of Air Pollution (Regulations)</u>, 9 VAC 5-20-230B and 9 VAC 5-80-1140E. See reverse of this form for instructions.

### COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

### DOCUMENT CERTIFICATION FORM

#### INSTRUCTIONS FOR USE

Various provisions of the Regulations for the Control and Abatement of Air Pollution require that certain documents submitted to the Board or the Department be signed by a responsible official with certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Documents covered by this requirement include, but are not limited to, permit applications, registrations, emission statements, emission testing and monitoring reports, or compliance certifications. The certification should include the full name, title, signature, date of signature, and telephone number of the responsible official. A responsible official is defined as follows (Regulations, 9 VAC 5-20-230A.):

- a. For a business entity, such as a corporation, association or cooperative, a responsible official is either:
  - (1) The president, secretary, treasurer, or a vice-president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or
  - (2) A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.
- b. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.
- c. For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Certification is required with each application submittal, including amendments to an application (i.e. new pages, revisions to existing pages and other amendments to application information).

Reference: Regulations, 9 VAC 5-80-1140D. Letters, phone calls, etc. are considered additional supplementary information to the certified application submittal.

# COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR PERMIT APPLICATION GENERAL INFORMATION

PERSON COMPLET	ING FORM		DATE	REGISTRATION NUMBER								
		<u> </u>										
REASON(S) FOR SUBMISSION (Chec	k all that apply):											
STATE OPERATING PERMIT	THIS PERMIT IS APPLIED	FOR P	URSUANT TO PRO	VISIONS OF THE								
	VIRGINIA ADMINISTRATIV	E CODE	, 9 VAC 5 Chap	ter 80, Article 5 (SOP)								
NEW (Greenfield) SOURCE	THIS PERMIT IS APPLIED											
MODIFICATION of a SOURCE	FOLLOWING PROVISION(S)  9 VAC 5 Chapter 8											
MODIFICATION OF a BOOKED												
	9 VAC 5 Chapter 8											
RELOCATION of a SOURCE 9 VAC 5 Chapter 80, Art. 9 (NON-ATTAINMENT MAJOR SOURCES)												
Non-Binding Letter of EXEMPTION												
AMENDMENT to a Permit dated: Permit type: SOP(Art.5) NSR (Art.6)												
Amendment Type: THIS AMENDMENT IS REQUESTED PURSUANT TO THE PROVISIONS OF:												
Administrative Amendment	9 VAC 5-80-970 (	SOP Ad	m.) 9 VAC	5-80-1270 (NSR Adm.)								
Minor Amendment	9 VAC 5-80-980 (	SOP Mi	nor) 9 VAC	5-80-1280 (NSR Minor)								
Significant Amendment	9 VAC 5-80-990 (	SOP Si	g.) 9 VAC	5-80-1290 (NSR. Sig.)								
Complete Pages 1, 2, and 3 and refer to the above checked provisions for additional information requirements. Form 7 pages may be used to satisfy those requirements.												
Notification of Change i	n Ownership - Effect	ive D	ate:									
Notification of Facility	v Name Change - Effec	tive i	Date:									
noclination of fucility	name change file	0_10										
Notification of Owner Na	ame Change - Effective	e Dat	e:									
Other (Specify):												
COMPANY AND DIVISION NAME:												
MAILING ADDRESS:												
TELEPHONE NUMBER:	NUMBER OF EMPLOYEES AT SIT	 ΓΕ:	PROPERT	Y AREA AT SITE:								
TEEL HONE WOMBER.	NOMBER OF EMILEOTEEOTH OF		111012111	TARESTATIONE.								
EXACT SOURCE LOCATION – INCLUDE NAME (	OF CITY (COUNTY) AND FULL ST	REET A	DDRESS OR DIREC	CTIONS:								
PERSON TO CONTACT ON AIR POLLUTION MA	TTERS – NAME AND TITLE:	PHONE	NUMBER:									
FAX NUMBER:												
E-MAIL ADDRESS:												
Please check here if you obtained th	is form from the DEQ website.											
	FOR OFFICIAL USE ON	NLY										
COUNTY CODE:	PLANT ID NUMBER:		LAT/LONG	:								
	· · · · · · · · · · · · · · · · · ·											

### **GENERAL INFORMATION INSTRUCTIONS**

REASON FOR SUBMISSION - check the appropriate box(es) and the applicable regulation(s).

- "STATE OPERATING PERMIT" means that you are either an existing source applying for an operating permit, or are a NEW (Greenfield) SOURCE applying for a State Operating Permit concurrently with a permit to construct and operate the NEW (Greenfield) SOURCE. State Operating Permits are normally optional, and are requested for one of the reasons stated in 9 VAC 5-80-800 C.
- 2. "NEW (Greenfield) SOURCE" means that you are either constructing emission units at a new facility where no facility now exists, or you are constructing emission units at a facility that previously had no emission units at the facility. The NEW (Greenfield) SOURCE is (or may be) subject to permit review requirements.
- 3. "MODIFICATION of a SOURCE" means that (1) you already have emission units at your facility, (2) you are making physical or operational changes to the facility, (3) those proposed changes could result in a net emission increase of a regulated pollutant (or the emission of a regulated pollutant not presently being emitted), and (4) that physical or operational change is (or may be) subject to permit review requirements.
- 4. "RELOCATION of a SOURCE" means that you are relocating emission units from a facility in one location to a new or existing facility in another location, and that relocation is (or may be) subject to permit review.
- 5. "Non-Binding Letter of EXEMPTION" means that you are applying for written confirmation that a particular change is not subject to permit review under 9 VAC 5, Chapter 80, Articles 6, 8, or 9.
- 6. "PERMIT AMENDMENT" means that you have an effective air permit for your source, and you need changes made to that permit that do not qualify as a "MODIFICATION of a SOURCE".
- 7. "REGISTRATION/REGISTRATION UPDATE" means that you are applying to register a source that is not otherwise subject to permit review under 9 VAC 5, Chapter 80, Articles 6, 8 or 9, or you are applying to update a previous registration. See 9 VAC 5-20-160 of the regulations.
- 8. "NOTIFICATION OF CHANGE IN OWNERSHIP" means that you simply are notifying DEQ of the changes as required by regulation.
- 9. "NOTIFICATION OF FACILITY NAME CHANGE" means that you simply are notifying DEQ of the changes as required by regulation.
- 10. "NOTIFICATION OF OWNER NAME CHANGE" means that you simply are notifying DEQ of the changes as required by regulation.
- 11. "OTHER (SPECIFY)" means you intend to make a change to your facility, you do not know what air permitting requirements apply, and you wish for DEQ to evaluate the change for you and determine which requirements apply. Fill out the Form 7 as completely as possible and describe in a letter what you wish to do.

The listed regulations detail the various types of air pollution permits. Please indicate which of these you <u>believe</u> are applicable to this application. (More than one may apply). Sections of the regulations may be downloaded from the DEQ web site at <a href="http://www.deq.state.va.us/">http://www.deq.state.va.us/</a>. Copies of the regulations are available for purchase from the WestGroup by calling 1-800-328-4880 (Air regulations are contained in Volume 6, Title 9 of the Virginia Administrative Code).

**COMPANY AND DIVISION NAME** - list the official company name and the division if applicable.

**MAILING ADDRESS** - list the mailing address that corresponds to the facility on this application.

TELEPHONE NUMBER - list the phone number at the facility.

NUMBER OF EMPLOYEES AT SITE - list the number of employees at the facility.

PROPERTY AREA AT SITE - list the area in acres.

**EXACT SOURCE LOCATION** - provide a description of the facility location indicating street address or directions to facility; provide a map pinpointing the exact source location and specify where the plant property boundaries are, if requested by the regional office; provide a plant layout with dimensions of all buildings (height, length, width) at the facility indicating all stack and emission point locations by stack or reference number, if requested.

PERSON TO CONTACT ON AIR POLLUTION MATTERS - provide the name/title of a contact person for air pollution matters.

PHONE NUMBER - provide a phone number at which DEQ staff can reach the contact person.

FAX PHONE NUMBER - provide the fax number of the contact person, if there is one.

**E-MAIL ADDRESS** - provide an E-mail address of the contact person, if you wish to communicate with DEQ by e-mail.

**FOR OFFICIAL USE ONLY** - provided for use by the DEQ regional office.

### COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR PERMIT APPLICATION GENERAL INFORMATION (continued)

COMPANY NAME	DATE	REGISTRATION NUMBER		
FOR PORTABLE PLANTS:				
IS THIS FACILITY DESIGNED TO BE PORTABLE?		YES NO		
- IF YES, IS THIS FACILITY ALREADY PERMITTED	AS A PORTABLE PLANT?	YES NO	PERMIT DATE:	
IF NOT PERMITTED, IS THIS AN APPLICATION TO BE PLANT?	PERMITTED AS A PORTABLE	YES	NO	
IF PERMITTED AS A PORTABLE FACILITY, IS THIS A I - DESCRIBE THE NEW LOCATION OR ADDRESS ( MAP):		N? YES	NO	
- WILL THE PORTABLE FACILITY BE CO-LOCATED	D WITH ANOTHER SOURCE?	YES	NO REG. NO.:	
- WILL THE PORTABLE FACILITY BE MODIFIED OI	R RECONSTRUCTED AS A RES	ULT OF THE RELO	CATION? YES NO	
- WILL THERE BE ANY NEW EMISSIONS OTHER 1	THAN THOSE ASSOCIATED WIT	TH THE RELOCATIO	N? YES NO	
- IS THE FACILITY SUITABLE FOR THE AREA TO \	WHICH IT WILL BE LOCATED?	(ATTACH DOCUME	NTATION.) YES NO	
LIST THE STANDARD INDUSTRIAL CLASSIFICATION (S			: :	
PLEASE LIST ALL THE FACILITIES IN VIRGIN FACILITY:	IA UNDER COMMON OWN	NERSHIP OR COI	NTROL BY THE OWNER OF THIS	
MILESTONES. This section is to be completed modification to existing operations.	l if the permit application inc	cludes a new emi	ssions unit or	
MILESTONES*	STARTING DATE	ESTI	MATED COMPLETION DATE	
New equipment installation				
Modification of existing process or equipment				
Start-up dates				

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<sup>\*</sup>For new or modified installations to be constructed in phased schedule, give construction/installation starting and completion date for each phase.

### **GENERAL INFORMATION (continued) INSTRUCTIONS**

**COMPANY NAME** - give the company name, the date completed, and the registration number assigned to the facility if applicable.

**IS THE FACILITY DESIGNED TO BE PORTABLE?** - 9 VAC 5-80-1110 B defines "portable", to mean an emissions unit that is designed to have the capability of being moved from one location to another for the purpose of operating at multiple locations and storage when idle. Indications of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. If this facility is already permitted as a portable facility, list the date of the effective permit.

**IS THIS AN APPLICATION TO BE PERMITTED AS A PORTABLE PLANT?** - if the facility is designed to be portable, indicate whether or not you wish to have the permit contain specific conditions that will acknowledge this fact, so that the facility may be relocated without a new permit in accordance with 9 VAC 5-80-1320 A.1.c.

IS THIS A NOTIFICATION OF RELOCATION OF A PORTABLE FACILITY? - 9 VAC 5-80-1320 A.1.c allows the relocation of a properly permitted portable facility to be exempt from permitting requirements, as long as it meets certain requirements, one of which is timely notification of the relocation. This notification should be sent to the Director of the DEQ Regional Office into whose area of responsibility the facility will be relocated. The 15-day notification period begins when DEQ receives the notification. Submission of pages 1, 2, and 3 of this form 7 may be used for that notification (with "RELOCATION of a SOURCE" marked on Page 2). However, use of this form for that purpose is not required. Note that a site map and documentation of site suitability should accompany this form or whatever means of notification is used. Include the registration number of any stationary source that will be co-located with the portable facility at the new site.

Site suitability may be documented by the use of a properly certified Local Governing Body Certification Form from the locality to which the facility will be relocated, although that form is not required for this purpose. Contact the appropriate DEQ Regional Office for instructions. DEQ will make a determination of site suitability based upon regional and local requirements.

**PRODUCTS MANUFACTURED/SERVICED** - indicate the type of business in which this facility is engaged, listing products produced and/or services performed.

**SIC CODE(S)** - provide all 4-digit Standard Industrial Classification Code(s) for this facility and for the process(es). Place primary SIC in the first set of blocks.

**NAICS CODE(S)** - provide all 6-digit North American Industry Classification System Code(s) for this facility and for the process(es). Place primary NAICS in the first set of blocks.

**FACILITIES UNDER COMMON OWNERSHIP** - list the facilities in Virginia that are owned by the applicant company, its subsidiaries, and its parent company.

**MILESTONE DATES** - list all dates pertinent to this application as accurately as possible. For start-up dates, provide each relevant date as it might affect emissions, e.g., start-up of each unit, modification of each unit, imposition of or changes in permitted emissions for each unit.

FUEL-BURNING EQUIPMENT AND STATIONARY COMBUSTION ENGINES (EXCEPT INCINERATORS)

(BOILERS, TURBINES, GAS/DIESEL ENGINES, KILNS, ETC.):

COMPANY NAME REGISTRATION NUMBER

			M	MAXIMUM RATED			MAXIMUM R	ATED OUTPUT APP		
UNIT REF. NO.	EQUIPMENT MANUFACTURER, TYPE AND MODEL NUMBER	DATE OF MFR. OR CONST.	D C O D E *	INPUT HEAT CAPACITY FOR EACH FUEL (MILLION BTU/HR)	TYPE OF FUEL	TYPE OF EQUIPMENT (USE CODE A)	STEAM QUANTITY (lb/hr)	OUTPUT BRAKE HORSEPOWER (BHP)	ELECTRICAL POWER (KW)	USAGE (USE CODE B)

\* FOR MODIFICATION CODES SEE INSTRUCTIONS ON NEXT PAGE.

### Code A - Equipment

**BOILER TYPE:** 

- 1. Pulverized Coal Wet Bottom
- 2. Pulverized Coal Dry Bottom
- 3. Pulverized Coal Cyclone Furnace
- 4. Spreader Stoker
- 5. Chain or Travelling Grate Stoker
- 6. Underfeed Stoker
- 7. Hand Fired Coal
- 8. Oil, Tangentially Fired
- 9. Oil, Horizontally Fired (except rotary cup)
- 10. Gas, Tangentially Fired
- 11. Gas, Horizontally Fired

#### Code A (continued)

- 12. Wood with Flyash Reinjection
- 13. Wood without Flyash Reinjection
- 14. Other Specify
- STATIONARY ENGINE TYPE:
- 15. Combustion Turbine
- 16. Internal Combustion Engine
- 17. Other Specify
- OTHER COMBUSTION UNITS:
- 18. Oven / Kiln
- 19. Rotary Kiln
- 20. Process Furnace
- 99. Other Specify

### Code B - Usage

- 1. Steam Production
- 2. Drying / Curing
- 3. Space Heating
- 4. Process Heat
- 5. Food Processing
- 6. Electrical Generation
- 7. Mechanical Work
- 99. Other

### FUEL-BURNING EQUIPMENT AND STATIONARY COMBUSTION ENGINES INSTRUCTIONS

**UNIT REF. NO.** - assign a unique reference number for each piece of fuel burning equipment. If the facility has other equipment already registered, do not repeat those reference numbers. **NOTE:** Where a unit burns more than one fuel, assign a separate line for each, pegged to the unit (i.e., #1A for oil, #1B for the same unit burning coal, etc.).

**EQUIPMENT MANUFACTURER, TYPE AND MODEL NO.** - provide the nameplate information for each piece of equipment

**DATE OF MFR. OR CONST.** - give the date that each emission unit was installed, constructed in place, or manufactured.

**MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

**MAXIMUM RATED INPUT HEAT CAPACITY FOR EACH FUEL** - provide the manufacturer's maximum rated heat <u>input</u> in Million BTUs per hour based on the nameplate rating or maximum fuel usage.

**TYPE OF FUEL** - identify all the types of fuel that will be burned by each referenced piece of equipment and the corresponding data for each fuel type. If used in a process, relate this to the appropriate process.

**TYPE OF EQUIPMENT** - use Code A at the bottom of the page.

**MAXIMUM RATED OUTPUT APPROPRIATE TO SOURCE TYPE** - provide the maximum rated output capacity in units consistent with your operation. Examples: if a boiler is to be installed to generate process steam, then report pounds of steam per hour or boiler horsepower; if a turbine is to be installed to generate electricity, report kilowatts of electricity; if a diesel engine is to be installed to power a blower, report the output brake horsepower (Also known as mechanical horsepower).

**USAGE** - Use Code B at the bottom of the page.

### PROCESSING, MANUFACTURING, SURFACE COATING AND DEGREASING OPERATIONS:

COMPANY	NAM	E			DATE	DATE REGISTRATION NUMBER				
						1				
	M O					MAXIMU	IM EXPECTED FEED	INPUT**		
	D				MAXIMUM RATED	MAXIMUI	M EXPECTED FEED (	OUTPUT**		
UNIT REF. NO.	CODE	PROCESS OR OPERATION NAME	EQUIPMENT MANUFACTURER, TYPE AND MODEL NUMBER	DATE OF MFR. OR CONST.	CAPACITY/HR**	/HR	/DAY	/YEAR		

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<sup>\*</sup> Include flow diagram (process schematic) relating process steps and a narrative description including feed materials, product materials, reaction intermediates and by-products; attach appropriate MSDS or CPDS for raw materials used or consumed and products manufactured or handled. For modification codes see next page.

<sup>\*\*</sup> Specify units for each operation in Tons, Pounds, Gallons, etc., as applicable. Maximum Expected Feed Input for state operating permits shall be based on historical high or attach justification.

#### PROCESS OPERATIONS INSTRUCTIONS

**UNIT REF. NO. -** assign a unique reference number for each entry.

**MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

**PROCESS OR OPERATION NAME** - label each emission unit with the applicable process or operation, starting with initial step in the manufacturing process, followed by succeeding logical manufacturing steps until the process is complete.

EQUIPMENT MANUFACTURER, TYPE AND MODEL NUMBER - give the nameplate information or equivalent, one line per emission unit.

**DATE OF MFR. OR CONST.** - give the date that each emission unit was installed, constructed in place, or manufactured.

MAXIMUM RATED CAPACITY - maximum rated input capacity of the process or operation, in units of measure per hour.

**MAXIMUM EXPECTED FEED INPUT AND OUTPUT** - provide maximum amount of feed material expected to be processed (hourly, daily, and yearly) and or output as needed. Specify units. If maximum expected feed input is higher than the historical actual emissions, attach justification per 9 VAC 5-80-40.F.4.e of the <u>Regulations</u>. These numbers may be used to establish air permit limits and should be consistent with calculated emissions.

### **INKS, COATINGS, STAINS, AND ADHESIVES:**

COMPANY NAME	DATE	REGISTRATION NO.

UNIT REF. NO.	COATING MATERIAL (specify)	VOC OR HAP (specify name of HAP)		LBS VOC IN COATING AS APPLIED			LBS HAP PER GAL OF COATING AS APPLIED	COATING DENSITY (lbs/gal) AS	VOC CONTROL METHOD (Code O)	SOLIDS TRANSFER EFFICIENCY	MAXIMUM COATING USAGE AS APPLIED	
				PER GAL COATING	PER GAL COATING LESS H <sub>2</sub> O & EXEMPT SOLVENT	PER GAL SOLIDS		APPLIED			Gal./ hour	Gal./ year
		voc										
	CAS #: Name:											
		CAS #:										
		CAS #:										
		CAS #:										
		CAS #:										

#### Code N - COATING USE

- A. Large Appliance Coatings B. Magnet Wire Coatings
- C. Auto and Light Duty Truck Coatings
- 1. Prime Coat
- 2. Guidecoat
- Topcoat
- 4. Final Repair
- 5. Anti-chip
- 6. Anti-chip extreme performance
- 7. Anti-chip visible surface
- D. Aerospace Industries Coating E. Magnetic Tape Coating
- F. Can Coatings Base/Overvarnish
- 2. Internal body/external ends

- 3. 3-piece Can, side seam
- 4. End seals
- G. Metal Coil Coating
- H. Non-Printing Paper/Fabric Coating
   Publication Printing Inks and Coatings
   J. Packaging Printing Inks and Coatings

- K. Vinyl Coatings
  L. Metal Furniture Coatings
- M. Plastic Parts and Products Coatings
  N. Miscellaneous Metal Parts Coatings
- 1. Clear coatings
- 2. Air-dried Coatings
- 3. Extreme Performance Coatings
- 4. Other coatings

- O. Flatwood Paneling Coatings 1. Printed Hardwood/Particleboard
- 2. Natural finish Hardwood/Plywood
- 3. Class II Hardboard
- P. Paper and other Webs
- Q. Shipbuilding and Ship Repair Coating
- R. Wood Furniture Coating
- S. Flexographic Ink
- T. Lithographic lnk
- U. Rotogravure Ink
- V. Adhesives describe:
- W. Other Coatings

#### Code O - VOC CONTROL METHOD

- Low-VOC Coatings 1. High-Solids Coatings
  - 2. Low-Solvent Coatings
  - 3. Waterborne Coatings
- Powder Coatings
   UV Light/Electron Beam Cured Coatings
- 6. Electrodeposited Waterborne Coatings
- B. Increased Solids Transfer Efficiency
- C. Carbon Adsorption
- D. Incineration
- E. Enclosures Partial Capture Efficiency

F. Other:

### INKS, COATINGS, STAINS, AND ADHESIVES INSTRUCTIONS

This page is intended to address volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) resulting from application of inks, coatings, or stains. Each page may describe these pollutants from a single emissions unit. NO INFORMATION IS NECESSARY IN THE DARKLY SHADED AREAS.

**UNIT REF. NO.** - continue assigned reference number(s) from previous page(s).

**COATING MATERIAL** - List typical coatings and a design, worst case coating type, e.g., topcoat having the highest percentage VOC and highest of each toxic component content as applied to the substrate. NOTE: Where the term "coating" is used in these instructions, the instructions may also refer to inks, stains, or adhesives.

**VOC OR HAP** - The first line is for **Volatile Organic Compounds** (VOCs) in the coating. List these VOCs, then list the individual HAP components of the coating on the next lines. For each hazardous air pollutant, give the name and Chemical Abstract Services (CAS) Number.

**COATING USE** - Choose the coating usage type from the Code N list below the worksheet, and list the letter or letter and number combination that describes the coating use. Use more than one if that individual coating formulation has multiple uses. If "Other Coating" is selected, describe.

LBS. VOC IN COATING AS APPLIED - List the VOC content of the coating as it is applied to the substrate including any added solvent, in units of (1) Pounds (lbs.) VOC per gallon of coating, (2) lbs. VOC per gallon coating, minus water and exempt solvents, and (3) lbs. VOC per gallon coating solids. The above information should be calculated based on coating and solvent Environmental Data Sheets, Material Safety Data Sheets (MSDS), or Certified Product Data Sheets (CPDS) available from the coating supplier or manufacturer. Show calculations, if appropriate. If you have questions, please contact the Regional Office.

**LBS. OF HAP PER GALLON OF COATING AS APPLIED** - For each HAP component, list the pounds (lbs.) of HAPs per gallon of coating as applied to the substrate. Attach sample calculations, including any emission factors used, and MSDS or CPDS sheets, if appropriate.

COATING DENSITY - List the density of the coating as applied to the substrate in units of pounds per gallon (lbs/gal). Show calculations if coating is thinned or reduced.

VOC CONTROL METHOD - Choose the appropriate letter and/or number code from the Code O list. If "Other" is selected, please describe it.

**SOLIDS TRANSFER EFFICIENCY** - List the transfer efficiency as the ratio of the amount of coating solids deposited on the product to the amount of solids in the coating as applied.

MAXIMUM COATING USAGE AS APPLIED - List the maximum expected usage of the individual coating or coating type in terms of gallons per hour and gallons per year.

LIQUID AND/OR SOLID WASTE INCINERATORS: (NOT AN AIR EMISSIONS CONTROL DEVICE)

COMPANY NAME DATE REGISTRATION NUMBER

UNIT REF.	EQUIPMENT MANUFACTURER AND	DATE OF MFR. OR	M O D C O	INCIN TYPE (use code	WASTE TYPE (use	INCIN. MAX. RATED CAPACITY	AMOUN	MUM CTED T TO BE RATED	BURNER RATED CAPACITY (BTU/HR)		CAPACITY CHAI		MINIMUM SECONDARY CHAMBER RETENTION TIME	BURN DOWN CYCLE TIME
NO.	MODEL NUMBER	CONST.	D E	C)	code D)	(LBS/HR)	<u>LBS</u> HR	TONS YR	PRI.	SEC.	PRI.	SEC.	(SECONDS)	(HRS)

### Code C - INCINERATOR TYPE

- 1. Rotary Kiln
- 2. Mass Burn/Refuse Derived Fuel
- 3. Crematory
- 4. Single Chamber
- Multiple Chamber
- 99. Other (Specify)

### Code D - WASTE TYPE

- 1. Paper Waste
- Hospital Waste
- 3. Municipal Waste
- 4. Animal Waste
- 5. Crematory Waste
- 6. Industrial Waste
- 99. Other (Specify)

#### LIQUID AND/OR SOLID WASTE INCINERATORS INSTRUCTIONS

**UNIT REF. NO. -** assign a unique reference number for each incinerator.

**EQUIPMENT MANUFACTURER AND MODEL NO.** - emission unit manufacturer and model number. Include a diagram of the unit and specify any special features. If the unit is used for energy recovery, provide this information on the Fuel-Burning Equipment page.

**DATE OF MFR. OR CONST.** - give the date that each emission unit was installed, constructed in place, or manufactured.

### **MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

**INCINERATOR TYPE** - use Code C to indicate all categories applicable.

**WASTE TYPE** - use Code D and indicate all types burned. Refer to the attached classifications of types of waste which are to be incinerated.

INCINERATOR MAXIMUM RATED CAPACITY - maximum design input capacity in pounds per hour of waste type disposed of in this unit.

**MAXIMUM EXPECTED AMOUNT TO BE INCINERATED** - maximum amount of waste material expected to be incinerated in a 1-hour period and on an annual basis. For an air permit limit on this incinerator, this amount would be a reasonable and comfortable limit, taking future growth into account.

**BURNER RATED CAPACITY** - maximum rated heat input of primary and secondary chamber burners.

**MINIMUM CHAMBER TEMPERATURE** - Indicate the minimum temperatures which the burners in the primary and secondary chambers are designed to maintain while incinerating waste.

MINIMUM SECONDARY CHAMBER RETENTION TIME - minimum flue gas detention time in secondary chamber at specified minimum temperature.

BURN DOWN CYCLE TIME - time the unit will continue to completely incinerate the maximum designed charge rate before shutting down or charging a new batch.

### **VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS:**

COMPANY NAME							DATE	DATE REGISTRA			ATION NUMBER		
UNIT REF. NO.	TANK TYPE (USE CODE E)	DATE OF MFR. OR CONST.	M O D C O D E	SOURCE OF TANK CONTENT S (USE CODE F)	MATERIAL STORED NAME AND CAS NUMBER (Include Reid Vapor Pressure for Gasoline)	MAX. TRUE VAPOR PRESS. (psia)	VAPOR MOL. WEIGHT	DENSITY* (UNITS) @EF	MAXIMUM AVERAGE STORAGE TEMP.	TANK DIAM. (feet)	TANK CAPACITY (gallons)	MAXIMUM EXPECTED ANNUAL THROUGHPUT (gallons)	
										_			

### Code E - STORAGE TANK TYPE

- Fixed Roof
- (a) vertical tank
- 2. Floating Roof (a) Internal (welded deck)
- (b) horizontal tank
  - (b) Internal (riveted deck)

  - (c) External (welded deck)
  - (d) External (riveted deck)

### Code E (cont)

- Variable Vapor Space
- 4. Pressure Tank (over 15 psig)
- 5. Underground Splash Loading
- 6. Underground Submerged Loading
- 7. Underground Submerged Loading, Balanced
- 99. Other
  - (Specify):

### **Code F - SOURCE OF TANK CONTENTS**

- Pipeline
- Rail Car
- Tank Truck
- Ship or Barge
- Process

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<sup>\*</sup> Specify the ASTM temperature standard at which the density was measured.

### **VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANK INSTRUCTIONS**

**UNIT REF. NO. -** assign a reference number for each tank.

**TANK TYPE** - assign corresponding number(s) from Code E.

**DATE OR MFR. OR CONST.** - give the date that each emission unit was installed, constructed in place, or manufactured.

**MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

**SOURCE OF TANK CONTENTS** - assign corresponding number from Code F.

MATERIAL STORED - list all possible contents for each tank for mixtures; include maximum percent by weight of each component on a separate line.

MAXIMUM TRUE VAPOR PRESSURE - at storage conditions in terms of absolute pressure for mixtures, include maximum true vapor pressure of each component.

**VAPOR MOLECULAR WEIGHT** - list vapor molecular weight of stored material in pounds per pound mole. For mixtures, include the vapor molecular weight of each component.

**DENSITY** - list the density of the stored material. For mixtures, give the density of each component.

STORAGE TEMPERATURE - list the maximum average temperature at which the material is stored.

TANK DIAMETER - list tank diameter in feet.

**TANK CAPACITY** - list tank capacity in gallons.

MAXIMUM EXPECTED ANNUAL THROUGHPUT - indicate the maximum annual throughput limit that is sought in the application.

### **VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS (continued)**

COMPANY NAME REGISTRATION NUMBER

	M TANK COLOR		COLOR	FIXED ROO	PF ONLY	FL	DATING ROOF ONLY
	O D						
UNIT REF. NO	C O D E	SHELL	ROOF	INTERNAL TANK HT. OR LENGTH (feet)	MAXIMUM HOURLY FILLING (gallons)	SEAL TYPE (USE CODE G)	MAXIMUM HOURLY WITHDRAWAL (gallons)

### Code G - SEAL TYPE (EXTERNAL ONLY)

- 1. Metallic Shoe
- (a) primary only
- (b) shoe mounted secondary
- (c) rim mounted secondary
- 2. Liquid Mounted Resilient, weather shield
- 3. Vapor Mounted Resilient, weather shield

### (EXTERNAL OR INTERNAL)

- 4. Liquid Mounted Resilient, primary only
- (a) external
- (b) internal
- 5. Liquid Mounted Resilient, secondary
- (a) external
- (b) internal
- 6. Vapor Mounted Resilient, primary only
- (a) external
- (b) internal

- 7. Vapor Mounted Resilient, rim mounted secondary
- (a) external
- (b) internal
- 99. Other (Specify)

### VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANK (continued) INSTRUCTIONS

**UNIT REF NO. -** continue assigned reference number(s) from previous page.

### **MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

### For Fixed Roof Tanks:

TANK COLOR - SHELL/ROOF - list color(s) of shell and roof.

INTERNAL TANK HEIGHT OR LENGTH - for a vertical tank, list the height in feet. For a horizontal tank, list the length in feet.

**MAXIMUM HOURLY FILLING** - maximum gallons that could be pumped into the tank in one hour, starting with an empty tank.

### **For Floating Roof Tanks:**

**SEAL TYPE** - assign corresponding number(s) from Code G.

MAXIMUM HOURLY WITHDRAWAL - maximum gallons that could be withdrawn from the tank in one hour, starting with a full tank.

### **LOADING RACKS AND OIL-WATER SEPARATORS:**

COMPANY NAME DATE	REGISTRATION NUMBER
-------------------	---------------------

		M			LOADING R	OIL/WATER SEPARATORS ONLY	
UNIT REF. NO.	NAME OF PRODUCT LOADED OR RECOVERED	C O D E	MAXIMUM HOURLY THROUGHPUT (gallons)	MAXIMUM ANNUAL THROUGHPUT (gallons)	TYPE OF LOADING (USE CODE H)	HATCH VAPOR CLOSURE ON LOADING ARMS (USE CODE I)	TYPE OF ENCLOSURE (USE CODE J)

### Code H - TYPE OF LOADING

- Overhead Loading splash fill, normal service
   Overhead Loading submerged fill, normal service
   Bottom Loading normal service
- 4. Overhead Loading splash fill, balanced service
- 5. Overhead Loading submerged fill, balanced service
- 6. Bottom Loading Balanced service

### Code I - HATCH VAPOR CLOSURE

- 1. None, open to air
- 2. Emco Wheaton
- 3. OPW
- 4. Chiksan LTV
- 99. Other (Specify)

### Code J - TYPE OF ENCLOSURE

- 1. Open
- 2. Partially Open3. Floating Roof
- 4. Sealed Cover

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#### LOADING RACK AND OIL-WATER SEPARATOR INSTRUCTIONS

**UNIT REF. NO. -** assign a reference number for each loading rack.

**NAME OF PRODUCTS LOADED OR RECOVERED** - for loading racks, list all possible materials loaded for each rack. For oil-water separators, list all possible materials recovered.

### **MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

MAXIMUM HOURLY THROUGHPUT - expected maximum gallons to be loaded from the rack or entering the oil-water separator in one hour.

**MAXIMUM ANNUAL THROUGHPUT** - expected maximum gallons to be loaded from the rack or entering the oil-water separator in one year, this amount would be a reasonable and comfortable limit considering future growth.

### For Loading Racks Only:

TYPE OF LOADING - assign corresponding number(s) from Code H for each unit.

HATCH VAPOR CLOSURE ON LOADING ARMS - assign corresponding number(s) from Code I for each unit.

### For Oil-Water Separators Only:

TYPE OF ENCLOSURE - assign corresponding number(s) from Code J for each unit.

# STACK PARAMETERS AND FUEL DATA:

COMPANY NAME	DATE	REGISTRATION NUMBER
--------------	------	---------------------

			VEN	T/STACK O	R EXHAUST D	ATA		FUEL(S) DATA							
UNIT REF. NO.	VENT/ STACK NO.	VENT/ STACK CONFIG. (USE CODE K)	VENT STACK HEIGHT (feet)	EXIT DIA. (feet)	EXIT GAS VELOCITY (fpm)	EXIT GAS VOLUME (acfm)	EXIT GAS TEMP. (°F)	TYPE OF FUEL	MAX. RATED BURNED/H OUR (SPECIFY UNITS)	MAX. EXPECTED BURNED/ DAY (SPECIFY UNITS)	MAX. EXPECTED BURNED/ YEAR (SPECIFY UNITS)	HIGHER HEATING VALUE (SPECIFY UNITS)	MAX. % SULFUR	MAX. % ASH	

# Code K - Vent/Stack Configuration

- Unobstructed vertical discharge
   Obstructed vertical discharge (e.g., raincap)
   Horizontal or downward discharge (e.g., T-stack)
   Other (specify)

### STACK PARAMETERS AND FUEL DATA INSTRUCTIONS

**UNIT REF. NO.** - continue the unique assigned reference number(s) from page(s) 3 through 8.

**VENT/STACK NO.** - one reference number may have many exhaust points. Assign a unique vent/stack number for each vent or stack through which the process or equipment identified by this unit reference number exhausts.

**VENT/STACK CONFIGURATION** - indicate the appropriate configuration by using Code K.

**VENT/STACK HEIGHT** - list the exit height (in feet) from the ground level.

**EXIT DIAMETER** - list the inside diameter (in feet) of the vent/stack at its exit. For rectangular vents, provide length and width (in feet) of the vent/stack at its exit.

**EXIT GAS VELOCITY** - list the velocity in feet per minute of the stack gas as it exits the vent/stack.

**EXIT GAS VOLUME** - list the volume of the flow in actual cubic feet per minute.

**EXIT GAS TEMPERATURE** - list the temperature in degrees Fahrenheit.

**TYPE OF FUEL** - identify all the types of fuel that will be burned by each referenced piece of equipment and the corresponding data for each fuel type.

MAXIMUM RATE BURNED PER HOUR - provide the maximum rated fuel input at maximum design capacity in units such as pounds, gallons or cubic feet per hour.

**MAXIMUM EXPECTED AMOUNT OF FUEL BURNED PER DAY** - provide the maximum amount of fuel input expected in 24 hours. Use units corresponding to fuel type (e.g. tons for solid fuels, etc.).

**MAXIMUM EXPECTED AMOUNT OF FUEL BURNED PER YEAR** - provide the maximum amount of fuel input expected in one year. Use units corresponding to fuel type (e.g. tons for solid fuels, etc.).

**HIGHER HEATING VALUE** - provide the higher heating value of the specified fuel in BTUs per unit of fuel.

MAXIMUM PERCENT SULFUR - identify the highest percent sulfur content for the fuel.

**MAXIMUM PERCENT ASH** - identify the highest percent ash content for the fuel.

COMPANY NAME	DATE	REGISTRATION NUMBER
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	М				AIR POLLUTI	MONITORING INSTRUMENTATION			
	O D						% EFFICIE	NCY	
UNIT REF. NO.	C O D E	VENT/ STACK NO.	DEVICE REF. NO.	POLLUTANT/PARAMETER (See instructions)	MANUFACTURER AND MODEL NUMBER	TYPE (USE CODE L)	DESIGN	ACTUAL	SPECIFY TYPE, MEASURED POLLUTANT, AND RECORDER USED

### Code L - AIR POLLUTION CONTROL EQUIPMENT TYPE

- 1. Settling Chamber
- 2. Cyclone
- 3. Multicyclone
- 4. Cyclone scrubber
- 5. Orifice scrubber
- 6. Mechanical scrubber
- 7. Venturi scrubber
- (a) fixed throat
- (b) variable throat
- 8. Mist eliminator

- 9. Electrostatic Precipitator
  - (a) hot side
  - (b) cold side
  - (c) high voltage

  - (d) low voltage
  - (e) single stage
  - (f) two stage
  - (g) other (specify)
- 10. Filter
- (a) baghouse
- (b) other (specify)
- 11. Catalytic Afterburner
- 12. Direct Flame Afterburner

### 13. ABSORBER

- (a) packed tower
- (b) spray tower
- (c) tray tower
- (d) venturi
- (e) other (specify)

#### 14. ADSORBER

- (a) activated carbon
- (b) molecular sieve
- (c) activated alumina
- (d) silica gel
- (e) other (specify)
- 15. Condenser (specify)
- 99. Other (specify)

#### AIR POLLUTION CONTROL AND MONITORING EQUIPMENT INSTRUCTIONS

**UNIT REF. NO.** - continue assigned reference number(s) from previous page(s).

**MODIFICATION CODE** - Choose a code and insert:

- 0. No change.
- 1. for increase in regulated limit.
- 2. for physical change in emissions unit.
- 3. for changes in related equipment.
- 4. for new emissions unit(s).
- 5. for replacement emissions unit(s).

VENT/STACK NO. - assign a unique vent/stack number for each vent or stack through which the process or equipment identified by this reference number exhausts.

**DEVICE REF. NO.** - assign a unique pollution control device reference number(s).

**POLLUTANT/PARAMETER** - list all pollutants emitted from this process/equipment that are controlled and/or monitored. List all surrogate parameters of the process/equipment that are monitored (e.g. - opacity, CO<sub>2</sub>, etc.).

## **Air Pollution Control Equipment:**

**MANUFACTURER AND MODEL** - list the manufacturer and model of the control equipment associated with the pollutant listed in the preceding column. **TYPE** - identify the type of control equipment by using Code L.

PERCENT EFFICIENCY - list the design and actual control efficiency for the control equipment and associated pollutant.

## **Monitoring Instrumentation:**

**MONITOR MANUFACTURER AND MODEL NUMBER** - list the manufacturer and model number of the stack gas monitor used to measure emissions of the specified pollutant at this emission point. List opacity monitors in association with particulate/PM<sub>10</sub> emissions.

SPECIFY TYPE OF RECORDER TO BE USED - list the type of recorder associated with the monitor (e.g. strip chart, data logger, etc.)

## AIR POLLUTION CONTROL EQUIPMENT - SUPPLEMENTAL INFORMATION:

COMPANY NAME	DATE	REGISTRATION NUMBER
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DEVICE REF. NO.	TYPE (Use Code L)	LIQUID FLOW RATE(gpm) (Codes 4,5, 6,7,13,15)	LIQUID MEDIUM (Codes 4,5,6,7, 13,15)	CLEANING METHOD (Codes 9, 10,13,14)	NUMBER OF FIELDS (Code 9)	NUMBER OF SECTIONS (Codes 9,10)	AIR- TO- CLOTH RATIO (fpm) (Code 10)	FILTER MATERIAL (Code 10)	INLET TEMP (EF)	REGENERATION METHOD & CYCLE TIME (sec) (Code 14)	CHAMBER TEMP. (EF) (Codes 11,12)	RETENTION TIME (sec) (Codes 11,12)	PRESSURE DROP (in. H <sub>2</sub> O) (if Codes 3,4,5,6,7, 10,13)

#### Code L - AIR POLLUTION CONTROL EQUIPMENT TYPE

- 1. Settling Chamber
- 2. Cyclone
- 3. Multicyclone
- 4. Cyclone scrubber
- 5. Orifice scrubber
- 6. Mechanical scrubber
- 7. Venturi scrubber
  - (a) fixed throat
  - (b) variable throat
- 8. Mist eliminator

- 9. Electrostatic Precipitator
  - (a) hot side
  - (b) cold side
  - (c) high voltage
  - (d) low voltage
  - (e) single stage
  - (f) two stage
  - (g) other (specify)
- 10. Filter
- (a) baghouse
- (b) other (specify)
- 11. Catalytic Afterburner
- 12. Direct Flame Afterburner

- 13. ABSORBER
  - (a) packed tower
  - (b) spray tower
  - (c) tray tower
  - (d) venturi
  - (e) other (specify)
- 14. ADSORBER
  - (a) activated carbon
  - (b) molecular sieve
  - (c) activated alumina
  - (d)silica gel
- (e) other (specify)
- 15. Condenser (specify)
- 99. Other (specify)

### AIR POLLUTION CONTROL EQUIPMENT (SUPPLEMENTAL INFORMATION) INSTRUCTIONS

**DEVICE REF. NO.** - continue assigned reference number(s) from previous page(s).

**TYPE** - identify the type(s) of control equipment by using Code L. Code L offers a wide array of control equipment types to choose from, and many will not apply to a given situation. The other columns suggest codes to use from the Code L selection.

NOTE: For the remaining spaces, the applicable control device type numbers (see Code L) for which this information is required are listed in parentheses on the form.

**LIQUID FLOW RATE** - list in gallons per minute.

**LIQUID MEDIUM** - specify the type of liquid used in the control equipment, and the pH. For condensers, specify inlet temperatures of condensing medium (water, glycol, etc.) and inlet temperature of gas stream.

**CLEANING METHOD** - specify the method of cleaning the control equipment (e.g., a baghouse, No. 10a).

NUMBER OF SECTIONS/FIELDS - list the number of fields or chambers for ESPs (No. 9), or number of chambers for baghouses (No. 10).

AIR-TO-CLOTH RATIO - list in feet per minute or as specified by manufacturer (cubic feet per minute gas flow to square feet of cloth).

**FILTER MATERIAL** - list the type of material used for the baghouse filters.

**INLET TEMP.** - list the temperature at the inlet of the control equipment in degrees Fahrenheit.

**REGENERATION METHOD & CYCLE TIME** - list the regeneration method (steam stripping, hot air, etc.) and cycle time in seconds for adsorbers (No. 14). If regeneration is done offsite, please so state.

**CHAMBER TEMP.** - list the combustion temperature of afterburner chamber in degrees Fahrenheit.

**RETENTION TIME** - list the retention time for afterburners in seconds.

PRESSURE DROP - list the pressure drop across the control equipment in inches of water.

# PROPOSED MAXIMUM CRITERIA POLLUTANT EMISSIONS:

COMPANY NAME	DATE	REGISTRATION NUMBER
	DATE	

М	MAXIMUM EMISSION RATES TO ATMOSPHERE OF CRITERIA POLLUTANTS															
O D	Pl	M *	P۱	/I <sub>10</sub> *	S	O <sub>2</sub>	N	O <sub>X</sub>	C	0	VC	C*	ı	Pb	STATE	
CODE	(PARTI MAT	CULATE (TER)	SMA PARTIO	LLER CULATE	(SUI	LFUR XIDE)	(NITF OXI	ROGEN DES)	(CAF MON	RBON DXIDE)	ORG	SANIC	(L	EAD)	PERMIT EMISSION CAP	BASIS OF ESTIMATE (USE CODE M)
_	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	(Yes/No)	
	O D C O	C (PARTION MATE)	PM *  C (PARTICULATE MATTER)  E	C (PARTICULATE SMAPARTICULATE) PARTICULATE D MATTER) MAT	C (PARTICULATE SMALLER PARTICULATE MATTER)  E (PARTICULATE SMALLER PARTICULATE MATTER)	C (PARTICULATE SMALLER PARTICULATE MATTER)  D MATTER)  PM * PM <sub>10</sub> * S  (10 µM OR SMALLER PARTICULATE MATTER)	O D PM * PM <sub>10</sub> * SO <sub>2</sub> C (PARTICULATE SMALLER PARTICULATE DIOXIDE)  MATTER)  PM * SO <sub>2</sub> (SULFUR DIOXIDE)	PM * PM <sub>10</sub> * SO <sub>2</sub> N  C (PARTICULATE SMALLER PARTICULATE DIOXIDE)  MATTER)  PM * PM <sub>10</sub> * SO <sub>2</sub> N  (SULFUR DIOXIDE)  OXI	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> C (PARTICULATE SMALLER PARTICULATE MATTER)  (SULFUR DIOXIDE)  (NITROGEN OXIDES)	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO  C (PARTICULATE SMALLER PARTICULATE DIOXIDE)  (PARTICULATE MATTER)  (SULFUR (NITROGEN OXIDES) MONO  MATTER)	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO  COUNTY OF THE MATTER SMALLER PARTICULATE MATTER)  PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO  (SULFUR (NITROGEN OXIDES) (CARBON MONOXIDE)	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VC  C (PARTICULATE SMALLER PARTICULATE MATTER)  E (PARTICULATE MATTER)  PARTICULATE MATTER)  (SULFUR OXIDES)  (NITROGEN OXIDES)  (CARBON OXIDE)  (CARBON MONOXIDE)	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC*  (PARTICULATE MATTER) PARTICULATE MATTER)  PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC*  (SULFUR OXIDE) (NITROGEN OXIDES) (CARBON MONOXIDE) (COMPOUNDS)	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC* I  COUNTRY SO	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC* Pb  COUNTY OF THE PARTICULATE SMALLER PARTICULATE MATTER)  PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC* Pb  (VOLATILE ORGANIC COMPOUNDS)  (VOLATILE ORGANIC COMPOUNDS)	PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC* Pb STATE OPERATING PARTICULATE MATTER)  PM * PM <sub>10</sub> * SO <sub>2</sub> NO <sub>X</sub> CO VOC* Pb STATE OPERATING PARTICULATE MATTER)  (SULFUR (NITROGEN OXIDES) (CARBON MONOXIDE) (CARBON MONOXIDE) (LEAD)  (CAP (Yes/No)

Code M - Emission Estimate Method (provide detailed calculations including assumed control efficiency of control equipment to support reported values.)

<sup>1.</sup> Stack Test (include a copy of summary)

<sup>2.</sup> Material Balance (include calculations)

<sup>3.</sup> Emission Factor (identify source) and include calculations

<sup>99.</sup> Other (describe)

<sup>\*</sup> PM, PM<sub>10</sub>, and VOCs should also be split up by component and reported under TOXIC OR HAZARDOUS POLLUTANTS.

#### PROPOSED MAXIMUM CRITERIA POLLUTANT EMISSIONS INSTRUCTIONS

**UNIT REF. NO. -** continue assigned reference number(s) from previous page(s).

**MODIFICATION CODE** - Choose a code and insert:

0. - No change. 3. - for changes in related equipment.

1. - for increase in regulated limit. 4. - for new emissions unit(s).

2. - for physical change in emissions unit. 5. - for replacement emissions unit(s).

MAXIMUM EMISSION RATES TO ATMOSPHERE OF CRITERIA POLLUTANTS - list the emission rates to the atmosphere for the pollutants indicated in pounds per hour and tons per year. Provide detailed calculations including assumed control efficiency of control equipment (if applicable) and hours used per year.

**STATE OPERATING PERMIT EMISSION CAP** - State "yes" or "no" as follows: "Yes" means that the applicant voluntarily requests an emission cap for the unit in question that is lower than allowable emissions for the unit; "no" means no such request is made. A "yes" answer should be accompanied by <u>underlining</u> the proposed emissions of the pollutant for which the cap is sought, in the tons per year column.

BASIS OF EMISSION ESTIMATES - Indicate how emissions listed have been derived by using Code M. Include all calculations.

CRITERIA POLLUTANTS are defined as follows:

Particulate Matter (PM) - any airborne finely divided solid material with an aerodynamic diameter smaller than 100 micrometers.

Carbon monoxide (CO) - colorless, odorless, tasteless gas.

Particulate (PM<sub>10</sub>) - particulate matter with an aerodynamic diameter less than or equal to 10 micrometers.

Sulfur oxides (SOx) - measured as sulfur dioxide (SO<sub>2</sub>).

Nitrogen Oxides (NOx) - all oxides of nitrogen except nitrous oxide.

Lead (Pb) - metal.

**Volatile Organic Compounds (VOCs)** - (see definition in 9 VAC 5-10-20.) Do not include acetone as a VOC. Do not include perchloroethylene as a VOC, but list it as a hazardous air pollutant (HAP) on the next page. The following compounds are currently exempt from the definition of VOC (however, items 3 and 4 below are still to be reported as toxic pollutants on the next page):

- 1. Methane
- 2. Ethane
- 3. 1,1,1-trichloroethane (methyl chloroform)
- 4. Methylene chloride
- 5. Trichlorofluoromethane (CFC-11)
- 6. Dichlorodifluoromethane (CFC-12)
- 7. Chlorodifluoromethane (CFC-22)
- 8. Trifluoromethane (FC-23)
- 9. 1,1,2-trichlorotrifluoroethane (CFC-113)
- 10. 1,2-dichlorotetrafluoroethane (CFC-114)
- 11. Chloropentafluoroethane (CFC-115)
- 12. Dichlorotrifluoroethane (HCFC-123)
- 13. Tetrafluoroethane (HFC-134a)
- 14. Dichlorofluoroethane (HCFC-141b)
- 15. Chlorodifluoroethane (HCFC-142b)

Note: PM, PM10 and VOC emissions should also be split up by toxic component and reported as TOXIC POLLUTANTS on the next page.

# **PAST ACTUAL CRITERIA POLLUTANT EMISSIONS:**

COMPANY NAME	DATE	REGISTRATION NUMBER

	M O D	AVERAGE ACTUAL	. ANNUAL EMISSIONS T	O ATMOSPHERE OF CR	ITERIA POLLUTANTS F	OR THE PERIOD:	, 20TO	, 20	
UNIT REF.	С	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>X</sub>	СО	VOC	Pb	BASIS OF ESTIMATE (USE
NO.	O D E	(PARTICULATE MATTER)	(10 μM OR SMALLER PARTICULATE MATTER)	(SULFUR DIOXIDE)	(NITROGEN OXIDES)	(CARBON MONOXIDE)	(VOLATILE ORGANIC COMPOUNDS)	(LEAD)	CODE M)
		tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	

Code M - Emission Estimate Method (provide detailed calculations including assumed control efficiency of control equipment to support reported values.)

99. Other (describe)

<sup>1.</sup> Stack Test (include a copy of summary)

<sup>2.</sup> Material Balance (include calculations)

<sup>3.</sup> Emission Factor (identify source) and include calculations

#### PAST ACTUAL CRITERIA POLLUTANT EMISSIONS INSTRUCTIONS

**UNIT REF. NO. -** continue assigned reference number(s) from previous page(s).

**MODIFICATION CODE** - Choose a code and insert:

- 0. No change. 3. for changes in related equipment.
- for increase in regulated limit.
   for new emissions unit(s).
- 2. for physical change in emissions unit. 5. for replacement emissions unit(s).

AVERAGE ACTUAL EMISSIONS TO ATMOSPHERE OF CRITERIA POLLUTANTS FOR THE PERIOD - list the two-year period for which actual emission are averaged. Emissions are to be averaged over the last 24 consecutive months, unless another 24 consecutive month period is MORE reflective of NORMAL operations. If another period is used, please attach an explanation for using the different period.

PAST ACTUAL EMISSIONS AVERAGE for EACH POLLUTANT - list the average ACTUAL annual emissions to the atmosphere for the pollutants indicated in tons per year for each emission unit with MODIFICATION CODES 1, 2, 3 or 5. Be careful to include debottlenecked emission units (MOD CODE 3). The average is calculated using actual annual emissions for the past 24 consecutive months. If there is another 24 consecutive month period that is more reflective of NORMAL operations, that period may be used with DEQ concurrence.

BASIS OF EMISSION ESTIMATES - Indicate how the emissions listed have been derived using Code M. Include all calculations.

**CRITERIA POLLUTANTS** are defined as follows:

Particulate Matter (PM) - any airborne finely divided solid material with an aerodynamic diameter smaller than 100 micrometers.

Carbon monoxide (CO) - colorless, odorless, tasteless gas.

Particulate (PM<sub>10</sub>) - particulate matter with an aerodynamic diameter less than or equal to 10 micrometers.

Sulfur oxides (SOx) - measured as sulfur dioxide (SO<sub>2</sub>).

Nitrogen Oxides (NOx) - all oxides of nitrogen except nitrous oxide.

Lead (Pb) - metal.

Volatile Organic Compounds (VOCs) - (see definition in 9 VAC 5-10-20.) Do not include acetone as a VOC. Do not include perchloroethylene as a VOC, but list it as a hazardous air pollutant (HAP) on the next page. The following compounds are currently exempt from the definition of VOC (however, items 3 and 4 below are still to be reported as toxic pollutants on the next page):

- 1. Methane
- 2. Ethane
- 3. 1,1,1-trichloroethane (methyl chloroform)
- 4. Methylene chloride
- 5. Trichlorofluoromethane (CFC-11)
- 6. Dichlorodifluoromethane (CFC-12)
- 7. Chlorodifluoromethane (CFC-22)
- 8. Trifluoromethane (FC-23)
- 9. 1,1,2-trichlorotrifluoroethane (CFC-113)
- 10. 1,2-dichlorotetrafluoroethane (CFC-114)
- 11. Chloropentafluoroethane (CFC-115)
- 12. Dichlorotrifluoroethane (HCFC-123)
- 13. Tetrafluoroethane (HFC-134a)
- 14. Dichlorofluoroethane (HCFC-141b)
- 15. Chlorodifluoroethane (HCFC-142b)

# SOURCE-WIDE TOXIC OR HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS FROM THE PROPOSED FACILITY:

COMPANY NAME	DATE	REGISTRATION NUMBER

SOURCE-WIDE MAXIMUM  TOXIC OR HAZARDOUS	EMISSION RA	RATES TO ATMOSPHERE OF POLLUTANT (Specify pollutant)*  IF CONTROLLED AS PROPOSED CONTROLS				**TOXIC OR HAP WAS ALSO REPORTED ON PAGE 15	STATE OPERATING PERMITS EMISSION CAP	BASIS OF ESTIMATE S		ОООМ	VENT/
POLLUTANT (HAP) NAME	CAS#	lb/hr	tons/yr	lb/hr	tons/yr	AS:(PM/PM <sub>10</sub> /VOC or N/A)	(YES/NO)	(USE CODE M)	UNIT REF. NO.	0 D	STACK NO.

Code M - Emission Estimate Method (provide detailed calculations including assumed control efficiency of control equipment, if applicable)

- 1. Stack Test (include a copy)
- 2. Material Balance (include calculations)
- 3. Emission Factor (identify)
- 99. Other (describe)

\*\* Specify which pollutants are also reported as components of PM, PM<sub>10</sub>, or VOC on page 15.

<sup>\*</sup> Toxic Pollutant means a pollutant on the designated list at the front of this application. Particulate matter and volatile organic compounds are not toxic pollutants as generic classes of substances, but individual substances within these classes may be toxic pollutants because their toxic properties or because a TLV (tm) has been established. See the toxic pollutant listing in the front of this application.

### SOURCE-WIDE TOXIC OR HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS INSTRUCTIONS

PROPOSED FACILITY - complete this page for any new emissions or increased emissions of toxic Pollutants or HAPs resulting from the <u>Proposed</u> Facility (from a new plant, or from any new, modified, reconstructed, or debottlenecked processes or equipment at an existing plant. It is not necessary to list each toxic or HAP emitted from the source unless so directed by the DEQ Regional Office. Then, for each toxic pollutant listed, which is not exempt by 9 VAC 5-60-300 C.3, 4 or 5, or D, E, or F or 9 VAC 5-80-1320 F of the <u>Regulations</u>, list the total source-wide emissions of that pollutant. Compliance is based on total toxic emissions from the source.

Reproduce these pages as necessary to provide information on the applicable toxic and HAP pollutants.

TOXIC OR HAP POLLUTANT NAME - List each toxic or HAP for which there are new or increased emissions from any emission unit at the source, as a result of the proposed changes.

CAS NO. - list the Chemical Abstract Services (CAS) number for each listed pollutant.

**MAXIMUM EMISSION RATES TO ATMOSPHERE OF TOXIC POLLUTANTS** - list the source-wide emission rates to the atmosphere for all listed toxic or HAP pollutants. in pounds per hour and tons per year per pollutant. List both the controlled emission rates and the emission rates without the proposed controls. . The controlled emission rates may be used to set air permit limits. Provide detailed calculations of the emission rates, using (for the proposed controlled emission rates) the proposed control equipment, and using the proposed limits on material, throughput and/or hours of operation per year.

Note: Any PM, PM10, or VOC emissions with Toxic Pollutant components should be also be listed on this page as TOXIC POLLUTANTS.

TOXIC OR HAP ALSO REPORTED ON PAGE 15 AS: (PM/PM<sub>10</sub>/VOC or N/A) - Specify which pollutants are also reported as components of PM, PM<sub>10</sub>, or VOC on page 15.

**STATE OPERATING PERMIT EMISSION CAP** - State "yes" or "no" as follows: "Yes" means that the applicant voluntarily requests an emission cap for the unit in question that is lower than the current allowable emissions for the unit; "no" means no such request is made. A "yes" answer should be accompanied by <u>underlining</u> the proposed emissions of the pollutant for which the cap is sought, in the tons per year column.

BASIS OF EMISSION ESTIMATES - Use Code M to indicate how the emissions that are listed, have been derived.

UNIT REF. NO. - continue assigned reference number(s) from previous page(s). List all emission unit reference numbers that emit this toxic or HAP pollutants.

MODIFICATION CODE - Choose the appropriate code(s) and insert:

- 0. No modification. 3. for changes in related equipment.
- 1. for increase in regulated limit. 4. for new emissions unit(s).
- 2. for physical change in emissions unit. 5. for replacement emissions unit(s).

VENT/STACK NO. - list the assigned unique vent/stack number for each vent or stack through which the process or equipment identified by this reference number exhausts.

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# OTHER REGULATED POLLUTANT EMISSIONS FROM THE PROPOSED FACILITY:

COMPANY NAME	DATE	REGISTRATION NUMBER
COMPANY NAME	DATE	

	М		MAXIMUM EN	ISSION RAT	ES TO ATMOSPH	ERE OF POLLUTA	NT (Specify polluta	ınt)*		
	O D					OLLED AS POSED	WITHOUT THE PROPOSED CONTROLS			
UNIT REF. NO.	C O D E	VENT/ STACK NO	OTHER REGULATED POLLUTANT NAME*	CAS NO.	lb/hr	tons/yr	lb/hr	tons/yr	STATE OPERATING PERMITS EMISSION CAP (YES/NO)	BASIS OF ESTIMATES (USE CODE M)

Code M - Emission Estimate Method (provide detailed calculations including assumed control efficiency of control equipment, if applicable)

- 1. Stack Test (include a copy)
- 2. Material Balance (include calculations)
- 3. Emission Factor (identify)
- 99. Other (describe)

<sup>\*</sup> Other Regulated Pollutant means any pollutant listed in the definition of "regulated pollutants" in Article 6 (9 VAC 5-80-1110 C) of the Regulations except for the Criteria Pollutants (PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC and Pb) and the toxic/HAP pollutants listed on the toxic/HAP pollutant listing in the front of this application.

#### OTHER REGULATED POLLUTANT EMISSIONS INSTRUCTIONS

PROPOSED FACILITY - complete page for emissions of "Other Regulated Pollutants" from each emission unit.

**UNIT REF. NO.** - continue assigned reference number(s) from previous page(s).

**MODIFICATION CODE** - Choose a code and insert:

- 0. No modification. 3. for changes in related equipment.
- 1. for increase in regulated limit. 4. for new emissions unit(s).
- 2. for physical change in emissions unit. 5. for replacement emissions unit(s).

VENT/STACK NO. - assign a unique vent/stack number for each vent or stack through which the process or equipment identified by this reference number exhausts.

OTHER REGULATED POLLUTANT NAME - List each "other regulated pollutants" emitted from the facility/emission units listed. "Other regulated pollutants' are those pollutants listed in the definition of "regulated pollutants in Article 6 (9 VAC 5-80-1110 C) of the Regulations except for the Criteria Pollutants (PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC and Pb) and the toxic/HAP pollutants listed on the toxic/HAP pollutant listing in the front of this application.

CAS NO. - list the Chemical Abstract Services (CAS) number for each listed pollutant.

MAXIMUM EMISSION RATES TO ATMOSPHERE OF OTHER REGULATED POLLUTANTS - list the emission rates to the atmosphere for all pollutants listed in the definition of "regulated pollutants in Article 6 (9 VAC 5-80-1110 C) of the Regulations except for the Criteria Pollutants (PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC and Pb) and the toxic/HAP pollutants listed on the toxic/HAP pollutant listing in the front of this application. Give the maximum emission rates of each pollutant in pounds per hour and tons per year per reference number. List both the controlled emission rates and the emission rates without the proposed controlled emission rates may be used to set air permit limits. Provide detailed calculations of the emission rates, using (for the proposed controlled emission rates) the proposed control efficiency of control equipment, and using the proposed limits on material, throughput and/or hours of operation per year.

**STATE OPERATING PERMIT EMISSION CAP** - State "yes" or "no" as follows: "Yes" means that the applicant voluntarily requests an emission cap for the unit in question that is lower than the current allowable emissions for the unit; "no" means no such request is made. A "yes" answer should be accompanied by <u>underlining</u> the proposed emissions of the pollutant for which the cap is sought, in the tons per year column.

BASIS OF EMISSION ESTIMATES - Use Code M to indicate how the emissions that are listed, have been derived.

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**OPERATING PERIODS:** (Optional use, to establish restriction on operating hours.)

COMPANY NAME	ATE	REGISTRATION NUMBER
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	PERCENT	Γ ANNUAL USE/T	HROUGHPUT B	Y SEASON	NORMAL PROCESS/EQUIPMENT OPERATING SCHEDULE			MAXIMUM EQUIPMENT/PROCESS OPERATING SCHEDULE		
UNIT REF. NO.	DECEMBER  FEBRUARY	MARCH  MAY	JUNE  AUGUST	SEPTEMBER NOVEMBER	HOURS PER DAY	DAYS PER WEEK	WEEKS PER YEAR	HOURS PER DAY	DAYS PER WEEK	WEEKS PER YEAR
	TEBROART	WAI	A00001	HOVENIBER	DAI	WLLK	ILAK	DAI	WLLK	ILAN

MAXIMUM FACILITY OPERATING SCHEDULE							
HOURS PER DAY	DAYS PER WEEK	WEEKS PER YEAR					

### **OPERATING PERIODS INSTRUCTIONS**

**UNIT REF. NO. -** continue assigned reference number(s) from previous page(s).

**PERCENT ANNUAL USE/THROUGHPUT BY SEASON** - Give the percentage of time the process or equipment was operated (past five years), by the indicated seasons. Do the same for the proposed operation.

NORMAL PROCESS/EQUIPMENT OPERATING SCHEDULE - indicate the normal operating schedule expected for the process equipment.

MAXIMUM PROCESS/EQUIPMENT OPERATING SCHEDULE - indicate the maximum operating schedule expected for the process/equipment.

MAXIMUM FACILITY OPERATING SCHEDULE - indicate the maximum number of hours of operation for the entire facility.